

SRC takes postgraduate education to task for being too narrow

by Alan Cune
Science Correspondent

British postgraduate education must become more diverse and broadly based if national needs are to be met. This is the principal theme of two reports *Postgraduate Training* and *New Postgraduate Patterns*, published this week by the Science Research Council.

The most significant recommendation in *Postgraduate Training* is the suggestion that the SRC should seek a substantial increase in maintenance grants paid to students working in research areas judged to be of particular importance to the nation.

The chief conclusion in the report, the work of a nine-man committee chaired by Sir Sam Edwards, SRC chairman, is that: "There is insufficient diversity in the types of education offered to students in most of the needs of industry, commerce and the public services for science based postgraduate in the wide variety of careers outside research."

It recommends:
● A new form of training of equal status to the PhD but based on a course and project work across a broad spectrum. The SRC should bring together representatives of the universities and polytechnics, industry, and government departments to formulate firm proposals.
● Some research studentships should be awarded competitively to students who would be free to choose their own project, supervisor and department.

Although the White Paper on devolution was nearly written, the Government had not finally made up its mind on the position of the Scottish universities. Mr. Short, Lord President and Minister responsible for devolution, told representatives of the universities last week.

In a meeting that was called disappointing and "a waste of time" by some of the Scottish principals and vice-chancellors, Mr. Short said the White Paper was all but written, except for three outstanding issues of which the position of the universities was one.

After listening to representatives of the eight Scottish universities, including students, Mr. Short had an informal tea meeting with the university principals, at which the case for retaining the Kingdom university grants committee was put to him.

Sir Sam Curran, principal of Strathclyde University, told Mr. Short of the need to retain contacts with British industry, in order to provide Scottish graduates with the fullest range of their skills.

Dr. George Burnet, principal of Heriot-Watt, emphasized the needs of scientists and engineers working in Scotland and the problems of financing their work within a devolved system of government.

Sir Hugh Robson, principal of Edinburgh University, told Mr. Short that the SRC was left in no doubt that the majority view in the Scottish universities was that they needed to know more details about the assembly and its powers before they could give an intelligent answer on what to do with the universities.

It is understood that some of the principals were privately disappointed by Mr. Short's lack of knowledge of the universities' situation. He seemed surprised, for instance, that there were fears about representation on the assembly. "You might want to interfere with the universities," he said.

He was told that interference with the financing of medicine in the Scottish universities would lead to a wholesale migration of the more able professors.

● The SRC should continue to give preference in allocating studentships to departments that provide broadly based postgraduate courses. The first year of all PhD courses should be compulsory for students of broadly based compulsory taught courses; successful completion of the course would lead to a master's degree and the chance to proceed with research.

● The SRC should encourage universities and polytechnics to join in consortia and, with scientific and technical bodies outside, to develop wide ranging and flexible programmes of postgraduate courses.

● The Cooperative Awards in Pure Science scheme, total technology and awards given by the SRC/SSRC joint committee should be increased.

● The SRC should seek a substantial increase in the value of studentships in special areas and on training schemes judged to be particularly important for the nation's economy.

The report says that 10 per cent of the training awards made by the SRC go at present to broadly based training schemes. "In today's circumstances, when only a minority can hope for a pure research career, it can be questioned if it is right or even justifiable that so many postgraduate students should receive training which, while not actually preventing them from taking up a variety of careers outside research, is seldom planned with such careers in mind."

The working party justifies its argument for differential grants on national grounds. "It is claimed by virtually all of those involved

in teaching postgraduate engineering that no major progress will be made in engineering research in this country until really able students can be attracted into postgraduate courses and that this will not happen until we pay our students a salary which is not merely a small fraction of what they can obtain in industry soon after graduation."

New *Postgraduate Patterns* is the second report of the joint SRC/SSRC committee on broader postgraduate education involving the natural and social sciences. The committee, chaired by Lord Ashby, former master of Clare College, Cambridge, recommends that after 1975 it should continue in a strengthened form to administer an enlarged portfolio of studentships for cross-disciplinary courses and research.

It also recommends that it should be able to finance modest research programmes in the area of collaboration between the natural and social sciences and it should be able to fund academics who want to be trained as supervisors of interdisciplinary postgraduate students.

The total cost of these and other recommendations will be about £1 million annually. *Postgraduate Training*, New *Postgraduate Patterns*, both available from the SRC, 474, Grafton Way, Holborn, WC1R 4TA. Grants on both reports are invited and should be sent to the SRC as soon as possible.

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Dr Boyson urges 'close and clean' cure for PNL

by David Welkar

Staff at the Polytechnic of North London united this week in opposition to the call by Dr Rhodes Boyson, MP, for the polytechnic to be closed as a result of disclosures made in a book published on Monday.

Dr Boyson said the polytechnic should be closed "for cleansing" after three teachers from PNL claimed in their book *Rage of Reason* that it had become the target of "left wing extremists, among both staff and students, whose aim was to bring about a revolution."

But while staff went on with the induction of new students in the first week of term, the book's account of the past few years has provoked heated arguments, with opinion predictably divided along partisan lines.

Outside the polytechnic the book has been praised for the courage of its revelations. Mr Norman St John-Stevens, MP, and Conservative spokesman on education, called the book "the best case for a radical and disciplined higher education as essential in the defence of freedom. He recommended every student to read it."

The book has been avidly read in other polytechnics. Dr Arthur Suddaby, provost of the City of London Polytechnic, said the book fulfilled a useful purpose in drawing attention to those responsible for disruption not only in education but in other activities throughout the world.

One of the polytechnic's opinion is rigidly divided. Mrs Caroline Cox, one of the authors, this week alleged that students were being indoctrinated with hatred of senior staff from the moment they arrived. Another senior member of staff blamed the book for frightening new students. She said students were afraid to hand over photographs of themselves because the impression had been given that the

authorities were vindictive.

Three major groupings of staff who preferred to remain anonymous because of what they called "trouble" in the polytechnic, said the majority of staff stood up and given a point of view that opposed the conventional wing wisdom.

While the authors of the book say the battle has been fought, it could be that their own in speaking up could stimulate frightened and apologetic staff sections," he said.

"People begin to assert themselves in taking a lot of garbage from left wing—whether it be students or staff."

In opposition to this, members of the Association of Teachers in Technical Institutions in the polytechnic singled out for collective blame Mr Cox and his fellow authors, pointing out that the book's account of the damage it will do to the polytechnic and its students.

Other members of staff have said that because the views of the authors have been so well set out, the book cannot possibly contain anything new or not read it.

A third view which can be attributed to the directors of the administration is that the book's facts are correct and it would do no harm to publish them. There is a danger that the polytechnic as a whole would be identified by the two parties named by the book as the main cause of the trouble. The trouble is confined to the small part.

Labour to look again at binary idea

A re-examination of the binary system of higher education has become Labour policy as a result of a successful motion of the party conference at Blackpool on Monday.

The motion, passed in the face of executive opposition, calls for a new education act which, among other things, would end private education and end, presumably, the fledgling Independent University College of Buckingham by 1980.

Replying for the executive, Miss Joan Legor, Under-Secretary for Education, said there was a widespread feeling that universities could be run more efficiently. Many people at the conference would agree. But the Government was not cutting higher education. They were merely asking universities and colleges to expand less rapidly, in line with existing party policy.

An earlier motion, which was heavily defeated, called for higher education for all, the abolition of discretionary grants, and the shift of resources from the universities to polytechnics and further education colleges. Proposing it, Mr. Alan Russett of the National Organization of Labour Students attacked the Government for its "waste education cuts."

"What would your reaction have been if it had been Thatcher and not Mulley imposing these cuts?" he asked.

He accused employers of demanding education at all levels. They controlled finance and research and the boards of colleges of education and universities. "Either they control education or our class controls it," he said. "The Labour Government should break with the capitalist system or there would be cuts in the standards of the working class."

Hint of change in quinquennial finance system

From page 1

"I do not believe that we have even if more narrowly defined purely intellectual excellence, a preserve of one class or one part of the community. There is a danger that systems which are highly selective will exclude talent throughout the polytechnic."

On finance, Lord Crowther-Hunt said the Government was ready to look at the advantages and disadvantages of fixed and quinquennial and any other possible alternative.

"We need to produce a system in which universities and colleges can get on with long term planning—while being capable of responding to short-term adjustments. There is a firm preference for fixed planning periods of three or five years as short as three years."

NEXT WEEK
University architecture leads, Edinburgh and Glasgow.
Bonnie on Africa and Studies.
A freshers conference at T. Dickinson on Whigs and Hunters.
Patrick Renshaw on Hope.
Gillian Sutherland on Cambridge.

Lord Crowther-Hunt, Minister of State for Higher Education, this week received a stern rebuke for his repeated suggestion that universities should only be admitted to higher education courses that were relevant to the country's future needs.

The criticism came from Mr. John Habakkuk, vice-chancellor of Oxford University, who said that formal courses in manpower planning might improve guesswork but as a basis of policy would do more harm than good.

Lord Crowther-Hunt, a fellow of Exeter College, told a conference in 1981 that he was determined to make that the country's further and higher education system would produce the men and women the country needed. Relevance had to be the guiding principle.

But this week Mr. Habakkuk, addressing Oxford's Congregation at the start of his third year of office, said: "No one in the universities would argue for irrelevance. But there are many different views among individual scholars as well as among different institutions, as to what constitutes relevance."

"We are attached to a system which gives weight to this diversity of view and we would expect any single dominant definition provided by the state of what constitutes social needs."

Higher Education SUPPLEMENT

October 10, 1975. No. 207

Spectre of dole queue drives up enrolment in colleges

by David Hencke

The spectre of the dole queue is encouraging an unprecedented number of young adults to enrol for courses at Britain's 500 colleges of further education.

National enrolments, when completed at the end of the month, could well show an increase of more than 5 per cent if returns follow the trend shown in a sample survey by *The Times* in 10 areas of Britain.

Universities also appear to have had an exceptional year for admissions with several universities reporting increases of between 10 and 25 per cent.

Exeter University has had an increase of 22.5 per cent in undergraduate numbers, Sussex 12.5 per cent, and Stirling almost 20 per cent.

The most dramatic increases in further education enrolments is at Liverpool. Its nine colleges of further education are reporting increases of between 20 and 40 per cent on courses for the 16 to 19 age group. Part-time day release courses are however static, reflecting economies by industry in sending students to college.

In some cases, notably parts of Cumbria and East London, there is evidence of colleges being over-run by applicants and being forced to turn some away because they have neither staff nor finances to reach them.

In other cases college administrators have been pleasantly surprised to find unpopular courses, such as engineering and construction, attracting students eager to learn skills which they hope to use at a later date.

To Dorby both full and part-time enrolments are expected to grow, though total enrolments to more than 6,000 at Derby College of Further Education.

Mr. John Leather, principal of the college, said he has been surprised to see that support from industry in sending students on part-time courses had not declined, while demand for O and A-level work was definitely increasing.

The Cumbria education authority has admitted that its disproporionate budget may well be causing students to be turned away from its colleges. Science, Technology, Working, increases in technical courses enrolments could well mean that, if further cuts are introduced next year, students will be turned away.

Mr. Eric Robinson, the principal of the college, found himself taking a class of 104 students in O-level science last week because of the sudden rush of enrolments.

In other areas of the country such as Warrington, Salford and Darlington, enrolments to technical colleges are rising and most colleges are expecting their courses to increase by 5 per cent. This means that many colleges will have an additional 500 students registered.

Evan in East Sussex, an area not associated with traditional unemployment, both Brighton and Eastbourne Further Education Colleges have reported increases directly attributable to unemployed school leavers.

Government plans to cut back financial support to further education while asking colleges to expand facilities for retaining because of unemployment were condemned as an appalling paradox by Mr. Bill Boden, education secretary of the Association of Teachers in Technical Institutions, last week.

He told his members on Saturday: "The further education service is already last week making its contribution to reducing the number of young people, particularly school leavers, on the unemployment register."

"The increasing enrolments in full-time courses in colleges show a sharp contrast between what young people feel they need and the resources which authorities are prepared to provide."

Mr. Habakkuk, who had been considered by the Robbins Committee over a decade ago, was the last to present a qualitative estimate of the future demand for highly qualified manpower was confessed.

The sort of man and woman the country needed was a large and fundamental matter, he added. The distribution of the university population between subjects could, in principle, be determined by the preferences of those wishing to enter universities, by the needs of the economy, by the needs of the intellectual traditions of the university.

In practice all three forces played a part in determining the balance of subjects and it was not true to say that universities produced whatever they liked.



You're in the wrong queue, man - no one ever got a Diploma for unemployment.

Hackney College, East London, which is situated in an area of high unemployment, reports that D-level courses have been heavily oversubscribed and that students are being turned away. The college also reports an increase in enrolments to industrial training courses.

Bradford College, in the centre of Yorkshire's textile industry, says that part-time day release students may have dropped 10 per cent while enrolments to O and A-level courses have dramatically increased.

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'Vaizey will not be Monash V-C'

Professor John Vaizey will not take up his appointment as vice-chancellor of Monash University in Australia after a disagreement over accommodation.

Professor Vaizey, at present head of the economics department at Brunel University, had been promised a new house on the campus, but he later asked the university to suspend its building plans in save money.

Cuts in research grants had just been announced and, he felt, his colleagues' jobs should come before his accommodation, although the existing vice-chancellor's house was too large for his needs.

Sir Richard Eggleston, the chancellor of Monash, said after a special council meeting last Friday that it was not possible to say that Professor Vaizey had resigned.

He said a note had been received on September 16 from the professor which said: "We have decided to stay here."

A letter dated September 19 had been received which made an reference to the cable but confirmed the attitude expressed in it. A handwritten addition also asked the university whether it did not think it should reconsider his appointment in the light of the consideration set out in the letter.

Monash prepared a statement, Sir Richard said, explaining that Professor Vaizey wished to withdraw and saying this had been accepted by the university. Professor Vaizey had agreed to this by telephone on September 30.

But the next day Professor Vaizey had telephoned the university to say he did not agree that he had resigned and would not agree to the press announcement.

In a later statement on Monday, Sir Richard said Professor Vaizey would definitely not be vice-chancellor. He would not say whether the university would readvertise the job.

Professor Vaizey said this week that the university had quoted his telegrammed statement of regret out of context. It was part of a much longer telegram. This and his subsequent letter had been an attempt to find out where he and his family should live if the plans for his new house were cancelled.

He said he then heard nothing further from the university until a telephone call early one morning asking him to agree a press statement about his withdrawal. He had refused to accept a statement that he had not seen in writing.

Professor Vaizey added: "I was looking forward very much to going, particularly after the warm welcome I received from students and staff. But if the university administration has decided my appointment is not going ahead, I will be delighted to stay at Brunel, where I have been happy for ten years."

I was intimidated, PNL lecturer says
Allegations of intimidation and "threatening events" engineered to oust the maintenance of the status quo at the Polytechnic of North London are made by a former business studies course leader in a letter to *The Times* this week.

Mr. E. D. Dugan-Ryatt alleges that when he tried to make improvements to the polytechnic's Higher National Diploma, in business studies, he was threatened with physical violence, had his filing cabinets broken into and was forced to resign his course leadership. Finally he was excluded from all his courses in the department.

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In his second article on university architecture since 1960, Sir James Richards discusses expansion in the older universities, taking as examples Manchester, Leeds, Edinburgh and Leicester

Most of the "older" universities were first built on central, but by their nature limited, sites during the nineteenth century or early the century (only the Scottish universities are older). Alternatively they were promoted after the war from the university colleges that already existed in a number of cities.

Few have been able to find the land needed for expansion alongside their original sites. Some have even moved out to the periphery. Others have simply had to build where they could. Dispersal in different parts of the city at least, one supposes, helps the student population to become townspeople as well. But it is inconvenient and not conducive to a clear identity.

The boldest course has been taken by Manchester where, on the initiative of the university but with the very necessary support of the city, four institutions which found themselves developing on contiguous areas have joined together to create, by clearing away slum housing and derelict industry, one immense educational precinct a mile and a half long and comprising 280 acres.

The four institutions were Manchester University, the University of Manchester Institute of Science and Technology (UMIST), Manchester Polytechnic (a recent amalgam of various city colleges) and the Royal Infirmary with its medical school. In 1963 they jointly appointed Hugh Wilson and Lewis Womersley as their planners.

It would obviously have been wrong for so large an area near the centre to be isolated from the rest of the city, and one aim of the plan has been to ensure against this. The public in any case enters the precinct to visit the Whitworth Art Gallery, which lies within it, to attend performances in the splendid old auditorium of the Royal Northern College of Music and of course to go to the hospital. Perhaps more elegantly, there are libraries and shops, serving housing areas near by, which keep people's life going within the precinct, and 4,000 students live in the precinct, and 2,000 out of a total of 20,000 students attached to the four institutions.

It is too big to be made a pedestrian precinct: in fact roads bearing quite a lot of traffic cut through it. But this gives it good public transport and the discomforts are to some extent compensated by a system of high-level walkways which will provide a convenient pedestrian network once some gaps have been bridged.

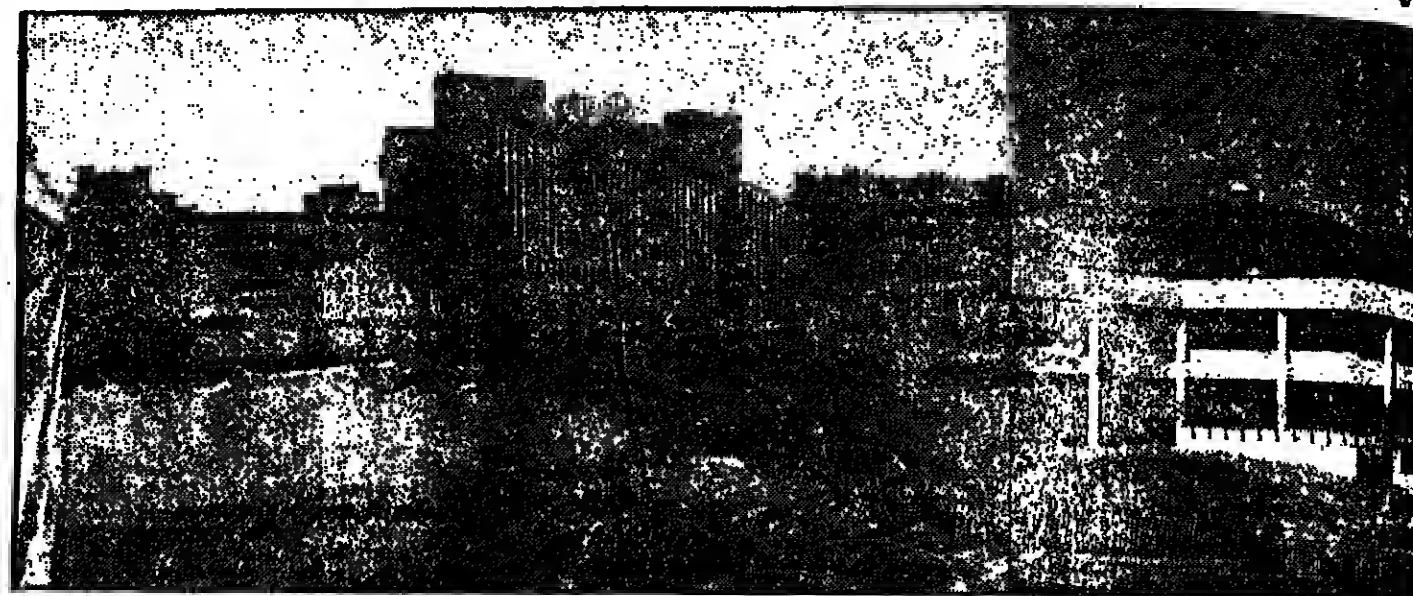
The main shopping centre and the entrance to many of the buildings are at this upper level. Architecturally, few buildings in the precinct are of distinction, but this at least ensures that it remains, visually as well as functionally, a part of Manchester.

The best example of an old university that has greatly expanded since 1960 but has, exceptionally, managed to do so by extending its original site is Leeds. Much of the residential accommodation is, however, elsewhere; Leeds University was lucky that the adjoining houses, due to redevelopment, and it was able to acquire them.

It should be added, however, that a kind of city planning has prevented the really close contact with city life that should result from being so near the centre. Between the centre and the university is a barrier of institutional buildings: the rather featureless polytechnic and a huge new teaching hospital now being built. It is of course functionally advantageous to have the university and medical school side by side, but a vast area of hospital buildings, towering over the university, does not encourage the citizens of Leeds to regard the university as their own and involve themselves in its activities.

The original university buildings, being on the highest point of the site, remain a city landmark. They date from the 1920s and are typical of that time. Leeds tragedy is that when it began to expand after the war, it made no advance architecturally, but tried to build itself in with a number of new buildings of ineptible design.

The union buildings, the "man-made fibres" building, and a range of engineering buildings on the northern edge of the site are as



Left, Leeds University Chancellor's Court—has a real monumental quality; right, Edinburgh University's student centre—bold conception.

chimney and lifeless as anything built in Britain at that time, and the first two stand immovably in the way of any intelligible connection between the older buildings and the new.

A fresh start was made in 1960, and Chamberlain, Powell and Bon were asked to prepare a master-plan, which has become the basis of the present expanded university. Their new buildings atop, to a series of courtyards, down the hill towards the city—or, rather, towards the site of the new hospital, the design of which (by other architects) seems insufficiently related to the university buildings.

The slope has been skilfully exploited, not only to enclose a sequence of interestingly varied spaces—one of these, Chancellor's Court, has a real monumental quality such as modern architecture seldom achieves—but to create a circulation system which helps to unify the whole university, making it an organism instead of the mere assemblage of buildings it was 20 years ago.

The system consists of a number of internal streets passing through the teaching buildings, each at one level. The main street, known as the Red Route, begins at ground level in the older part of the site and, because of the fall in the ground, emerges at third-floor level in the southernmost science buildings.

There is at present one gap between the recently completed library, along the shoulder of which the Red Route passes, and the original university buildings. This will be filled on completion of so already projected teaching block—the next, in fact, on the building programme.

The immediate programme will then be finished, although the master plan allows for a considerable extension of the sequence of courtyards.

The buildings enclosing those so far built make use of another ingenious device: they rest on identical clusters of columns, each with a hollow in the centre housing service pipes and stairs. This allows the floor space to be used for science or arts purposes as required, giving unusual flexibility between one department and another although of course denying any one department a separate external identity. The buildings have a consistent and vigorous architectural character derived from a bold articulation of glass and concrete elements.

The upper storey of each building is a penthouse designed for residential use, but available alternatively for the department beneath it to expand upwards if need be, thus creating more flexibility. The master plan also provides student housing on the western part of the site, only a small proportion of which has so far been built.

This comprises a compact group near one corner of Chancellor's Court, and a long range of rooms, under a single roof, overlooking a green space which has been very successfully crisscrossed out of a disused cemetery, but needs opening up a little more to allow it to make a more positive contribution to the total layout. The student housing is in red brick, instead of the concrete used elsewhere, to accord with the old houses that still stand around the site of the site.

Leeds University's wide area, as is proper in this urban context, is intensively utilized. The plan is, then, even if there is considerable growth in numbers (Leeds is already one of the larger universities, with 8,500 students), the present teaching accommodation will suffice.

Residential accommodation is another matter. Between 35 and 40 per cent of the students are housed in university-owned buildings, but most of these are suburban holiday residences, a form of housing which, with its medieval overtones, is not much liked by the present generation.

Their outgoing situation tends to emphasize a time-to-live, participation in university life and also creates transport problems, including parking problems, in the university

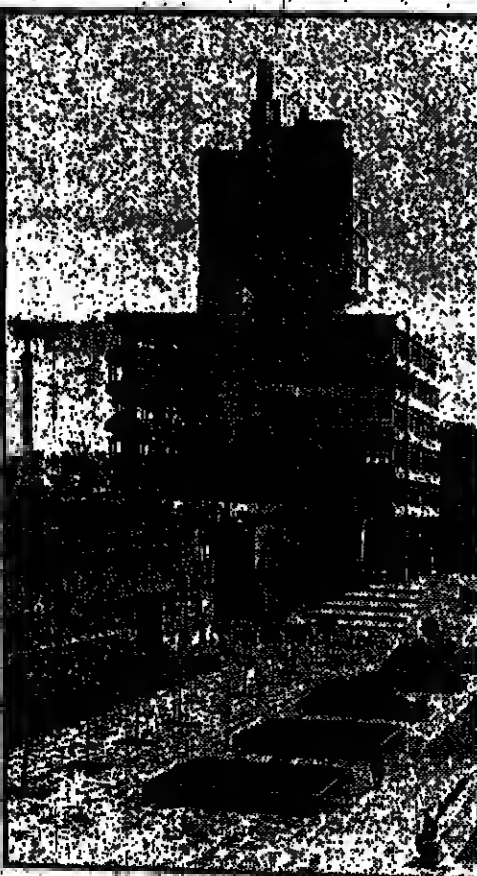
itself. What is required, especially until more residential accommodation can be built on the main site, is centrally-placed student flats which it will need the city's cooperation to provide.

If Leeds represents the large university which, as regards teaching accommodation, remains after expansion still in one place, Edinburgh University can represent those that have expanded simultaneously in different parts of the city.

It has managed to do so without distributing its buildings too far apart, so that a remodelling one quarter of Edinburgh in which the university is the dominant element. But this has only been done at the cost of exporting its science departments, which could not accommodate themselves to the existing grain of the city, to a separate site—King's Buildings—in the outer suburbs.

This is, in effect, almost an independent science community as it has its own common rooms and refectory. All science is concentrated there except for some first-year teaching in the Appleton Tower in George Square. King's Buildings dates from long before the 1960s and was at first poorly planned and designed, having the look of an industrial estate. But improvements have been made; a new road between the site and the lucrative golf course has taken through traffic out of the centre, landscaping has been attempted, and there is some better architecture. Notably there is a large new building for mathematics and physics with a lecture-theatre wing (the architect being Herdic Glover) due to be finished in 1976. This will help to hold the rather scrappy assortment of buildings together, although the King's Buildings environment can never be other than confused.

In central Edinburgh the scattered nature of its buildings has involved the university in the city's own planning policies and a long drawn-out controversy about a ring road has delayed many decisions. This ill-conceived proposal has at last been abandoned, but the university remains in the sense that few other universities (except Oxford and Cambridge) now are, at the mercy of the city authorities.



Leeds University's Charles Wilson building.

In order to make possible its major development of the 1960s, Edinburgh University had, in the preceding decade, to fight a planning battle which it won at the cost of much unpopularity. This has lasted, in a preservationist circles, to this day.

The battle was over George Square, which had to be taken over and rebuilt for university purposes if the whole university was not to be forced out to King's Buildings, and more widely scattered, new sites already built-up parts of the city. George Square was not far from the original sixteenth-century university and many of the houses in it were university-owned and occupied.

The sacrifice of a handsome residential square has been fully justified, since a university has acquired a spacious setting of some of the most important new buildings; and, in spite of cost limits having been progressively reduced, shows how increasingly important a factor is the choice of architects.

Similarly on the main campus the choice of architects in recent years has been knowledgeable and imaginative, under the guidance of Sir Leslie Martin. There has been no attempt at a constant architectural image, with the result that Leicester University offers a fascinating array of separate buildings by some of our most interesting designers.

In Leicester's compact campus this deliberate rejection of a unified total design, such as Leeds, for example, has achieved, takes on the acceptably miscellaneous character of the streets and squares of a normal town, relieved, however, from the latter's normal weight of wheeled traffic. Students are not allowed to bring cars on to the campus.

Among the more interesting buildings are the new library, designed by Denys Lasdun (1967), and the library, built only last year by Castle, Park, Dean and Hook. This is a glass-fronted extension of the university's old building, a dignified yellow-brick edifice erected as a mental asylum in 1837, and now housing the administrative centre. The new buildings, made as splendid foil to it and draw the eye away from some dreary neo-Georgian buildings put up in the 1950s.

At the other end of the small campus is a group of lecture buildings, laid out in 1957 by Sir Leslie Martin and designed in the early 1960s by him, by Colin St. John Wilson, and by the Architects' Co-Partnership. The Martin layout surrounded an enclosed garden court with a large concourse roofed by a glass dome—a bold conception but with a square mark against its acoustics.

There are plans to extend this building towards McBurn Hall, the nineteenth-century assembly hall built for the medical faculty but serving the whole university on legal and large-scale occasions. When this is done there will be a splendid opportunity to give another pedestrian enclosure between the two, giving the university—in Old College here and in George Square—a sequence of communal spaces closely related in fact and other.

Edinburgh University has 10,000 students but its housing problem is different from that elsewhere: the university is in a danger of becoming an isolated community because of the Scottish tradition of having lodgings or attending university from some distance. Less than 20 per cent of the students live in college-owned accommodation.

The largest development—developed at a second rate in its architecture as well as in its conception—is Pollock Halls, a group of halls of residence on the eastern edge of the city. A more interesting example in which the university is now involved is the conversion of old tenements in the medieval core into student flats, which has been done with great success in Glasgow.

A number of Byronic present universities, including several that have expanded, have

limits

since 1960, began as university colleges and achieved separate status only after the war. They include Southampton, Hull, Exeter and Dundee. Leicester University has been chosen to represent them all in this article.

Leicester has been the most enterprising architecturally, though Southampton and Hull have some good new buildings. It was founded at the beginning by rich rownsman and the city never seems to have felt itself involved in its development.

Leicester University has, nevertheless, within the city—though not in its centre—and its small campus (only 20 acres) is closely built up in a well-controlled urban style. The campus contains no residential accommodation, the nearest being a small group of self-catering flats—the style of housing most students nowadays prefer—to come into use just outside the gates. These, and some similar accommodation near by, will house 700 students.

Most of the students living in university-owned accommodation (1,800 out of a student population of 3,700) are in halls of residence that have been built, mostly since 1960, on the grounds of large suburban mansions between one and three miles from the campus. A good part of Oodby, just outside the city boundaries, has in fact become, as a result of far-sighted land acquisition, a student residential area.

This is convenient enough in its geographical relation to the campus, but inevitably encourages a nine-to-five mentality, and does nothing to involve the student in the life of Leicester itself. Given the small size of the campus there was perhaps little alternative. Leicester has fewer lodgings available than most cities because of the high proportion of women who work in its textile and boot-and-shoe industries.

The suburban halls of residence are by a variety of architects and most are admirably designed, especially College Hall, Knighton, by Trevor Dannatt (1960), Digby Hall, Oodby, by Richard Sheppard (1962) and Stamford Hall, Oodby, by Denys Lasdun (1964).

The building of halls of residence in the area goes back to 1950 and the fact that some of the more recent are also the best, in spite of cost limits having been progressively reduced, shows how increasingly important a factor is the choice of architects.

Similarly on the main campus the choice of architects in recent years has been knowledgeable and imaginative, under the guidance of Sir Leslie Martin. There has been no attempt at a constant architectural image, with the result that Leicester University offers a fascinating array of separate buildings by some of our most interesting designers.

In Leicester's compact campus this deliberate rejection of a unified total design, such as Leeds, for example, has achieved, takes on the acceptably miscellaneous character of the streets and squares of a normal town, relieved, however, from the latter's normal weight of wheeled traffic. Students are not allowed to bring cars on to the campus.

Among the more interesting buildings are the new library, designed by Denys Lasdun (1967), and the library, built only last year by Castle, Park, Dean and Hook. This is a glass-fronted extension of the university's old building, a dignified yellow-brick edifice erected as a mental asylum in 1837, and now housing the administrative centre. The new buildings, made as splendid foil to it and draw the eye away from some dreary neo-Georgian buildings put up in the 1950s.

At the other end of the small campus is a group of lecture buildings, laid out in 1957 by Sir Leslie Martin and designed in the early 1960s by him, by Colin St. John Wilson, and by the Architects' Co-Partnership. The Martin layout surrounded an enclosed garden court with a large concourse roofed by a glass dome—a bold conception but with a square mark against its acoustics.

There are plans to extend this building towards McBurn Hall, the nineteenth-century assembly hall built for the medical faculty but serving the whole university on legal and large-scale occasions. When this is done there will be a splendid opportunity to give another pedestrian enclosure between the two, giving the university—in Old College here and in George Square—a sequence of communal spaces closely related in fact and other.

Edinburgh University has 10,000 students but its housing problem is different from that elsewhere: the university is in a danger of becoming an isolated community because of the Scottish tradition of having lodgings or attending university from some distance. Less than 20 per cent of the students live in college-owned accommodation.

The largest development—developed at a second rate in its architecture as well as in its conception—is Pollock Halls, a group of halls of residence on the eastern edge of the city. A more interesting example in which the university is now involved is the conversion of old tenements in the medieval core into student flats, which has been done with great success in Glasgow.

A number of Byronic present universities, including several that have expanded, have

Alan Cane visits the freshmen's conference at Southampton University

A welcome to issues and bewilderment

You would need a powerful microscope to detect a Marxist cell at Southampton University these days. Described by a senior administrator as "possibly the most middle class university in the country", it presents to newcomers a cold and reassuring aspect reminiscent of the universities of 20 years ago.

In stark contrast to some institutions where, one reads, students are indoctrinated with hatred of senior staff from the moment they arrive, academics, administration and the students union at Southampton work together to make the newcomers feel at home.

It may well be a sign of the times that probably the most subversive comment Southampton freshmen heard in their first 48 hours on this campus came from Professor Laurence Gower, the vice-chancellor.

Referring to the "lunacy" of a Government decision to increase student grants by only 22 per cent while inflation was running at 25 per cent, he told successive groups of first years throughout the day: "I'm sure you all feel strongly about the level of your grants, and my God, so do I."

Southampton is a big university and about 1,600 freshmen went through the rigours of registration last week. For many, their first impressions of Southampton must have been coloured by the sight of the "Toastrack", a splendid scarlet Dennis bus of great age owned by the engineering society, waiting expectantly outside Southampton station.

Accommodation is a serious problem for students and there is a shortage of suitable flats in the city. Freshers, however, live in university-owned premises in their first year, and the authorities were visibly relieved that they had been able to find places for all (with the exception of 56 men in temporary accommodation while decoration in their hall is completed).

The halls provide a range of different accommodation—self-catering or partial board. The location of the union is at the end of the bells will be mixed by the end of next year.

Few of the freshmen realised that they would be moving into mixed halls, but none were against the idea and some positively relished it. Bill Torrens, a law student who felt his experience at boarding school was proving loveable in conquering the strangeness of the first few days, said: "I am delighted. After 10 years in a single sex school, it is a great change."

But if a place in hall solved the immediate problem of a roof over one's head, it entailed the certain prospect of a large hole in one's bank account, and it was clear that all new students saw money as their chief problem.

Last year it cost £274 for 30 weeks in a self-catering hall; this year the cost is £365, a rise of 33 per cent. Few freshmen had much idea how this would affect them. As one put it: "I can't say, I haven't paid the fees yet."

The union has few illusions, however. Southampton is hardly politically extremist now, although only a few years ago the far Left was in control. David Hughes, this year's president, is a second-year historian and Liberal. Philip Davis, vice-president and in charge of education and welfare, is a Labour Party member of Fabian persuasion.

Both emphasize that relations between the



Intent and attentive: beginning as they intend to continue?

administration and the union remain good despite severe differences of opinion over issues. Mr Hughes and Professor Gower, for example, recently visited Lord Crowthorne, Minister of State for higher education, to discuss university finance.

At this year's freshmen's conference everybody was presented with a statement from the union which set out the significant issues. These were student grants, education cuts, halls, hall fees, refectories and the university's crèche.

But for most freshmen, these problems were submerged in the bewilderment of arriving at a new institution. Several spoke of being impressed by the size of the university and the number of people they did not know. In spite of the efforts of the union and the administration most felt they were very much on their own.

One antidote was the round of events, films, discos and dances put on by the union. At Chamberlaine Hall (women only) a local rock group, played while freshmen from the hall and from the neighbouring Gisa Eyre Hall (mixed) got to know each other.

Brief interviews with a small number of first years provided no real surprises, but gave the impression that the kind of student who comes to Southampton probably has not changed much over the years.

Martin Coles, for example, had come to read electrical engineering and for him it was the course offered that settled the matter, as it was for Paul Granville who will be reading for a degree in ship science. Southampton has an enviable reputation in both these subjects.

Paul said he had every intention of having a good time at university but he intended to mix work and pleasure judiciously; his aim to make a career in ship design was very important. Martin, whose ambitions ran along the same lines was concerned about his self-catering flat: "Either we don't work much, or we don't eat."

Nicole Branton, doing combined honours in English and French, thought she had come to university to get an education, although her impression after 12 hours of the freshmen's conferences was that academic work seemed to take second place.

However, Rachel Jones, taking anthropology,

science, said she had not wanted to get a job, and was attracted by the idea of living on a grant. The reality was settling in early: "I thought I would get more than I am getting," she said ruefully.

Almost everybody thought it would be difficult living on their grants and there seems little doubt that the chief difficulty is the personal contribution. While only a very few students get the full grant, many parents find it difficult or are unwilling to make up the difference.

Angelo Roberts, studying history, said he had come to university to get a degree and to get away from home. This view was shared by Nuel Grovewood, reading physics, who said: "I wanted to learn about myself and how to live with myself and other people."

Both Angelo and Noel agreed that they would have to fit their social life around their work, although they were enthusiastic about the new freedom of choice open to them.

None of the students I spoke to confessed to any political commitment—more social scientists explained that his real ambition was to go into the Civil Service, and he would have been just as happy there as at university.

Although most already knew of the controversy over the levels of student grants, few students knew anything of the financial difficulties facing the universities. Few knew anything of polytechnics, although Paul said he believed they were equal in worth to universities.

None of the students would have gone in a polytechnic in preference, although one, clearly fired that the expected rock group had failed to materialize instead of a folk group, commented bitterly: "At a polytechnic you have to go home every night and not go in useless bare days."

The relief of hall presidents Steven Goodall and Dana Tucker, who had organized it. Dana confessed she had not slept for a week with worry, some indication of the effort that the union officials put into the freshmen's conference.

The overall impression was that the old university virtues still held strong at Southampton, and that a lot of time and trouble is taken over getting things right for the freshmen. Of course, you cannot get it right for everybody, like the very unhappy physician from Essex Anglia who had no real idea of why he had come to university, no real wish to get in grips with his subject, and who thought he was a victim of the educational treadmill.

What did the future hold for him? What was his ambition, whilst at university? "To enjoy myself," he muttered miserably.

IDS COMMUNICATIONS

A revised and updated List of Writings on Development Studies by IDS Members is issued as an annex to the 1974 Annual Report, and includes a List of IDS Publications. Books and main research reports are included from 1968, and articles and papers from June 1972. IDS work is published internally through two series: printed Communications and xeroxed Discussion Papers, which report on completed studies and work in progress. The quarterly Bulletin publishes brief, direct articles on issues of current importance to those concerned with problems of development and seeks to fill the gap between academic journals and newspapers and periodicals. The Register of UK-based ongoing research in Development Studies is issued periodically, and will be revised in 1976.

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A poor record as educational shopkeepers

David McDowall calls for a more positive approach to meeting the educational needs of the Arab world

British education has for too long behaved like an ageing aristocrat more conscious of purity of pedigree than the revenues which hold his castle together. Beyond his walls the market place has already begun to bustle with the buying and selling of educational wares.

Those who have travelled the Middle East since 1973 will be conscious of the immense investments being poured into education and training to provide a viable national infrastructure before oil ceases to flow to countries like Iran, Iraq, the Gulf States, Saudi Arabia and some of the North African countries.

Beyond the Middle East exist many developing countries, richer or poorer, where governments also hope to purchase efficient technology and skill to climb into the easier west of "developed" nations. When it comes to education almost all of them, even those outside the Anglophone link to Britain, for the best education on the market.

Yet one can hardly conceive of an educational system less ready to handle this demand. Each overseas student, whether private or government sponsored, must be individually processed and placed, which may take six months or more.

Imagine the difficulties of national planning in a rapidly expanding country like Iraq, where about 800 outstanding graduates in 1975 were offered scholarships by the Iraqi government, contingent on each individual winning his place in a Western, usually British, university.

Each candidate was granted funds for six months' English tuition prior to university entry once he had his acceptance for the latter. However, those few whose English was already good enough at the time of application obtained places.

Many others, frequently for reasons other than academic inade-

quency, fell by the wayside, victims of missed deadlines, incorrectly filled application forms, or often complete silence from the universities to which they had applied. Students were disappointed, the government was frustrated because it had placed only about 10 of its scholarship programme and British universities lost foreign revenue, which they urgently required to offset the short fall in British enrolment.

This is not to say that universities, polytechnics and other colleges are unaware of the need to justify foreign capital. The mushrooming of specialist courses for students from developing countries is itself evidence of a growing awareness in these institutions of a great need for revenue.

In many cases these courses are supported by the Ministry of Overseas Development, or the British Council, or a mixture of the two, or even of encouraging interest in Britain's educational system. But the system remains ad hoc and embarrassingly inadequate. This provides another reason for the understandable frustration of education-hungry governments which cannot afford to depend on our rhesus, individualist, penny-packet approach when their development plans succeed or fail on the adequacy of trained manpower to requisite levels.

Two days in which developing countries would buy a pig as a pig are passing. Flamingo bodies are becoming increasingly selective about the cultural and scientific (that alone industrial) wares of the developed world. Usually they require large-scale training in agriculture, engineering, health, administration and technical education, besides a variety of other disciplines.

Iraq, for example, sought training facilities this year for over 100 students in 72 different fields of engineering, some of which were esoteric (but they formed only a part of the relevant master's course in the United Kingdom).

How many of these students are placed is still uncertain, but suffice to say that the Ministry of Higher Education had to enlist the help of a visiting British academic, not even a professional agent, to place most of them.

But this example illustrates only a fraction of Iraq's requirements, let alone those of other countries,

all of which require training as vitally as technical as at graduate level, given the critical shortage of middle level personnel.

One of Britain's leading educational consultants has remarked that Iraq alone could be seeking more than 10,000, and possibly 20,000 training places in the United Kingdom by 1980.

There is no need for Britain to be pessimistic that her system is unable to meet this kind of requirement, but she must cut her cloth to the fashion required. In part there must be a change of attitude in those bastions of academic endeavour where commercial considerations have never been ingredients of decision making.

British academic institutions must also move from their traditional stance, which has had the dangerous effect of persuading developing countries that the kind of development or doctor's degrees are worthy qualifications. A move must be made back to evaluation of training according to its relevance to the task in hand.

The traditional individualistic approach of formal degree training is inadequate for the kind of development projects the planners have in mind. Behind the rigid adherence to "western-type" education, there exist planners and ministerial officials who are looking for tailor-made training.

In the long run, universities, polytechnics and other colleges may not be the best institutions to provide for this kind of demand. Britain should consider the establishment of centres or institutions of advanced and technical study, possibly in association with university or polytechnic departments already strong in their field.

They should be sufficiently flexible and well-equipped in both facilities (drawn from the current "wastage" of highly qualified graduates out of academics) and staff to offer comprehensive and intensive training in areas specified by the overseas market.

Where would the money come from? There is little doubt that several Middle East countries would consider the provision of capital, seed money and already expressed interest in funding training in areas specified by the overseas market. At present, a wide variety of bodies are to some extent becoming involved in the overseas market, including the Ministry of Overseas Development, the British Council, the Crown Agents, and other agencies.



The British Government could cost the commercial viability of such schemes, with pricing that the market could take. Charges, unlike current charges in universities which are subsidized even for overseas students by 80 per cent, would reflect actual costs plus profit. In short, Britain would market education as she markets other products.

Poorer governments, less able to bear commercial prices for this training, could receive from Britain the subsidies at present frequently spent on individual master degree courses which reflect neither donor nor recipient development criteria.

The key, whether it is for the system described, or whether it is merely to bring together the resources already in existence, is coordination. Britain has to date behaved rather like a car dealer who suggests to his client that he may like to stroll down the assembly line selecting the car parts which take his fancy, and put them together at home.

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Beyond this formidable and confusing array of different "experts" and "advisers" to whom overseas universities, polytechnics, and other colleges wish to use.

In the universities, particularly the market has not begun to flow into it. Too many of them have a taste to regard academics as the source of the commercial success without. As the sector declines, it will take at least another year or two for the universities to be able to turn their bread overseas.

Other universities, however, already responding to the market. One Middle Eastern country has already been offered a package of educational services (because of the number of people who had to be dealt with) and services so ad hoc that they were expressed in the response to its extensive requirements.

Official reaction to overseas requests is based on the present doubled limitations of which Britain has. It should be a more exhorting pressure to expand our capacity before it is too late.

These are possibly early days for the educational development, but it is in the early days that the market is made or lost. The United Kingdom and the United States are looking for position. It is a difficult one, but it will be left to be seen.

The prime proponents of overseas educational requirements are the Ministry of Overseas Development and the British Council. They have thus far thought to provide a close quarters the fierce, proud and antipathy proper to the women's colleges of Cambridge—as of Oxford—without succumbing to the desire for freedom from partisanship.

Little thought, however, has been given to a radical rethinking of education. Britain should offer a Department of Education and Science, and the University Grants Commission, should tap these agencies for the "feedback" on what is required.

The author has recently returned from working on educational development in India and the Middle East.

Women's long and unfinished battle for equal status

Gillian Sutherland discusses a new book on the struggle by women for academic acceptance at Cambridge University

Women's studies have become more and more a reality: they are a major growth area. Sometimes those who are trying to act out the double commitment to professional standards and family responsibilities, whether in husband, children and/or aged parents, get weary of having to repeatedly stand up, describe and justify what they are doing as well as doing it.

The sheer volume of investigation and publication, however, cannot be entirely fruitless and Rita McWilliams-Tullberg's study, simply justifies both the support given to her research by the British Academy and the access to their archives granted by the fellows of Girton and Newnham. So far as they are aware, she is the first person to have worked extensively in both.

But Women of Cambridge has more than its unique status to commend it. Although Mrs McWilliams-Tullberg is concerned, and rightly, to emphasize the book's general and instructive nature, it is a balanced, attractive, often witty account of the struggles from the 1850s onwards to establish two women's colleges at Cambridge and to achieve full membership of the university for them.

It was not so secured until 1948. The foundation of New Hall, the third women's college, followed in 1954; and Lucy Cavendish, formerly a graduate society making special provision for mature students, became an all-mature students, in 1972.

Rita McWilliams-Tullberg was not an undergraduate at Cambridge: her encounters with the university came when she was a member of Darwin, one of the new mixed graduate foundations. She has thus been able to observe at close quarters the fierce, proud and antipathy proper to the women's colleges of Cambridge—as of Oxford—without succumbing to the desire for freedom from partisanship.

But for the time being, it is perhaps peculiarly important in the Cambridge case, since from the beginning Girton and Newnham offered two sharply contrasting approaches to the question of higher education for women. For Emily Davies, the foundress of Girton, equality had to mean identity. She was only too aware of the possibility that the argument for higher education for women could be seen to be different from, higher education for men, could lead to the higher cooking and needlework, principles of child care, French conversation and piano playing.

She insisted that Girton students go through all the same academic rigour as men undergraduates. They were to aim only for examinations of tripos, that is, honours degree standard, taking the same amount of time to prepare for the men and taking also the same initial qualifying examination, the "prelims" or "little-go".

Aone Jemima Clough and Henry Sidgwick, together with the other founders of Newnham, took a different view. They were sharply aware, Miss Clough in particular, of the enormous deficiencies of girls' secondary education in the third quarter of the nineteenth century and the resultant strains of trying to reach tripos standard in a fixed and limited period of time.

Henry Sidgwick, too, in addition, already committed himself to the reform of university teaching methods and in particular was convinced that the "little-go", involving Latin with elementary Greek and mathematics, was becoming increasingly anachronistic and exerting a restrictive influence on secondary school curricula.

Newnham students were therefore allowed to pursue courses of study which did not conform to existing tripos requirements, if they chose, and to take as much time as was appropriate, given their initial qualifications and ultimate objectives.

Girton students, in 1873, petitioned Mrs Davies to be allowed to proceed to examinations of tripos standard without having to waste time on the "little-go". Sidgwick, who was then in power for the first time, was successful in getting the "little-go" abolished.

Women of Cambridge: A Men's University—though of it. Miss Davies, Rita McWilliams-Tullberg, London, Collins, 1975. £3.75.

Miss Davies's reaction was immediate, authoritarian and negative, showing the traits which later led to her becoming the first Girton student to become a Girton lecturer, to remark that "it was plain we counted for little or nothing, except as we furthered her plans".

She was tactless, obsessive, suspicious of the post to the point of paranoia; and her determination to keep her college uncorrupted by the very institutions whose intellectual life she wished to emulate, led to the siting of its building two and a half miles from the centre of the university, where her successors still have to contend.

The contrast with the deep affection inspired by Anne Jemima Clough and the role of the Sidgwick's Cambridge drawing room as a forum in which many of the major intellectual and social issues of the day were raised, is a balanced, attractive, often witty account of the struggles from the 1850s onwards to establish two women's colleges at Cambridge and to achieve full membership of the university for them.

Fore, perhaps, Mrs McWilliams-Tullberg underestimates the interaction of social insecurity with Miss Davies' undeniably prickly personality. The daughter of the evangelical rector of Gateshead, unmarried, initially receiving support from her mother, Madam Bodichon and George Eliot, whose reputations were, to say the least, exotic, she was a great deal more vulnerable than Miss Clough and the Sidgwick.

Anne Jemima Clough was the daughter of a free poet and the friend of Miss Nightingale. Henry Sidgwick was a fellow of Trinity and Knightbridge Professor of Moral Philosophy.

Perhaps the social as well as the intellectual tensions, first seen still in the folk tale that Girton was a female, built with a "set" that is, a separate bedroom and sitting-room for each student, while Newnham was for governesses, built with bedsitting-rooms for each student, could be seen to be different from, higher education for men, could lead to the higher cooking and needlework, principles of child care, French conversation and piano playing.

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portant share of attention, particularly in science subjects, since they lacked basic training; that in classics, history and geography the subject matter had to be modified for mixed audiences; and that the sheltered life of a women's college was hardly comparable to the character training offered by the "position of freedom and responsibility" in which male undergraduates found himself.

Only Alfred Marshall, the economist, was prepared to express publicly the view that women's intellects were inferior to men's; but the fundamentally sexist nature of the opposition soon began to emerge. Two thousand undergraduates demonstrated their sense of freedom and responsibility by petitioning the Senate to keep women out—the first petition of its kind since the petition of the 1850s to admit women to the Thirty-Nine Articles in 1771.

And on the day of the vote, after bombarding the voting MAs with comfort, flour and fire-crackers, the exuberant undergraduates marched on Newnham, to be halted only by barred gates, behind which the assembled lecturers stood and briefly outlasted them.

The profound upheavals of World War I and the success of the Oxford women in gaining degrees and full membership in 1919 encouraged the successors of Miss Davies, Miss Clough and the Sidgwick to try again.

This time the campaign lasted even longer; again the emotional temperature climbed. One fly-sheet, originating in Trinity in December, 1920, opposed co-education since this would "by altering the habits of undergraduate life, impair the heritage of men".

The resultant intercourse between the sexes would, for the most part, be of a trivial nature and would diminish the time spent by students either in work or in the valuable intercourse with others of the same sex. Its signatories proposed instead a university for women only, to sum up other part of the British Isles.

The Temperance scheme was canvassed quite widely and seriously, at a time at which the national economic situation had at last driven Cambridge, with Oxford, to seek a more radical solution. Again male undergraduates demonstrated their loyalty to the women; and when, in October, 1921, after a series of votes, women were finally granted the titles of degrees but excluded from full membership of the university, the young men celebrated their triumph by sending a memorial to Miss Clough and were only prevented from entering the college itself by the combined efforts of the proctors and the city police.

Now was the Royal Commission on Oxford and Cambridge, which finally reported in March 1922, one more help to the women. In a sentence which is memorable both for its logical confusion and the accuracy with which it portrays dominant attitudes and which give Mrs McWilliams-Tullberg her subtitle they declared: "We desire strongly that Cambridge should remain mainly and predominantly a men's university, though of a mixed type as it is already."

All efforts by the women's supporters to get full membership for women included in the legislation which followed the report, as the price of state aid to the university, failed.

The statutory commissioners for Cambridge set up by the Act made some amends in providing for the involvement of women in the reorganization of teaching; and of their 182 lectureships created under the new university statutes of 1926, 11 went to women.

But the formal right to take a full share in all aspects of the life and government of the university came only in 1948. The first ever women's tripos, or university press, were appointed in 1975; and the first ever woman vice-chancellor was installed last week.

The university still has statutory powers to limit the numbers of women admitted; and even in 1971, on the occasion of its centenary, the

governing body of Newnham invited them to be a clearing channel between marriage and family and an academic career is only now passing away. Only in the last decade have the Cambridge women's colleges begun to consider formal provision for maternity leave of rights to mixed colleges and government legislation on equal pay to force a consideration of salary structures.

In part this is a question of resources. None of them is conspicuously well endowed; and the unique college and university appointments has compounded more general problems of outlandish mobility and dislocation, by denying in the women's colleges a share of state money for teaching appointments proportionate to the number of students they actually teach.

But general poverty can be as much an attitude of mind as an objective state and ultimately it becomes a matter of priorities. To retain the existing fellows without straining their loyalty already described, to the utmost, and to show the mixed colleges how to breed up their own teaching fellows from their own women undergraduates, the women's colleges have not only to consider their formal structures of service and salary, but also to expose and challenge some very deeply rooted assumptions about the distribution of responsibilities within marriages and families.

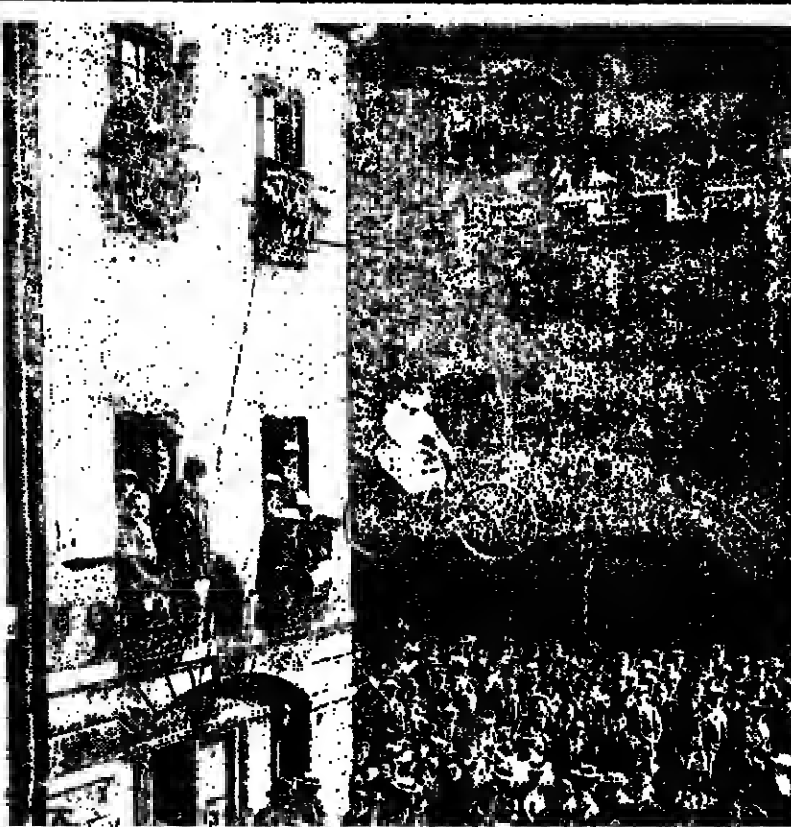
The career of many a male academic depends ultimately on a reservoir of unpaid and often highly skilled labour—the wife who researches, assists, types, domestic organizer, who listens to, feeds and generally supports not only their children but often also their students. No female academic can—or would accept—properly discharge her duties unless she is unreservedly on that kind of support.

Thus, then, is the long-term dilemma. There remains also a short-term tactical dilemma. With legislation on sex discrimination before Parliament, should the women's colleges have conducted an all-out campaign for special treatment?

Like rare animals, should they be asking for protection until the species is better established? Or do they say: "We face the rules or we face the consequences. We have no choice but to fight."

It is not the least of the merits of *Women of Cambridge*, that it helps to put this in perspective as a tactical dilemma and to see that there were no "right" or "wrong" solutions to the questions that divided the early supporters of women students at Cambridge. The very differences and debates and distinctive institutions which have given, and perhaps it is not too arrogant to hope, still give both quality and style to higher education in general.

The author is fellow of Newnham College, Cambridge.



Cambridge University undergraduates demonstrate against the admission of women to the university in 1897.

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In part this is a question of resources. None of them is conspicuously well endowed; and the unique college and university appointments has compounded more general problems of outlandish mobility and dislocation, by denying in the women's colleges a share of state money for teaching appointments proportionate to the number of students they actually teach.

But general poverty can be as much an attitude of mind as an objective state and ultimately it becomes a matter of priorities. To retain the existing fellows without straining their loyalty already described, to the utmost, and to show the mixed colleges how to breed up their own teaching fellows from their own women undergraduates, the women's colleges have not only to consider their formal structures of service and salary, but also to expose and challenge some very deeply rooted assumptions about the distribution of responsibilities within marriages and families.

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Recession refills the halls

from Alison Wolf

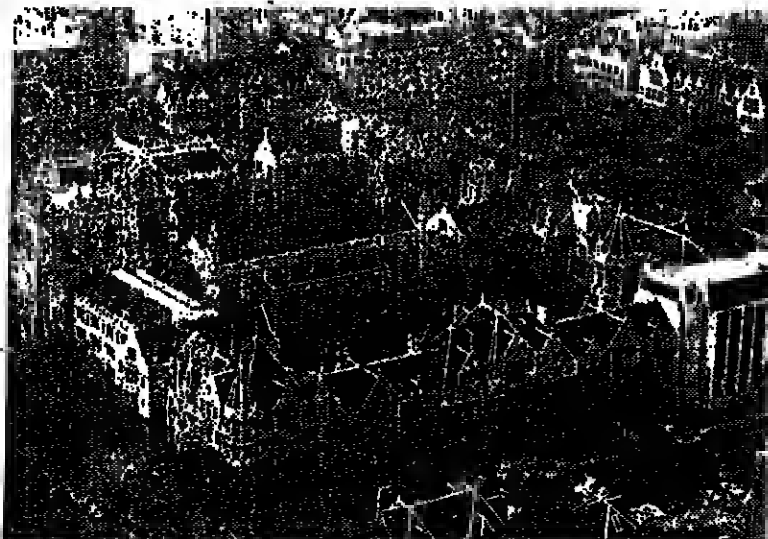
WASHINGTON
At the height of the student protests of the late 1960s, and the accompanying assault on the universities in loco parentis role, college dormitories (or hostels) were forsaken in favour of off-campus apartments and houses.

Many administrators found themselves with a quarter or more of their rooms empty, and closed dormitories down. The State University of New York at Buffalo, for example, cut back its beds by a third, converting one building into offices and renting another as a home for the aged. This year, with a writing list for campus housing, the old people have gone and the students are back in residence.

According to the Association of College and University Housing Officers, occupancy rates in the 500 largest colleges have risen for the first time in five years, to 98 per cent. That means the colleges in question have about a million students in residence and are collecting about \$68m in gross revenues this year.

In many of those colleges, too, waiting lists are enormous. Some are renting blocks of rooms in local hotels and many are turning single rooms into doubles and doubles into three-bed rooms.

In part, the student return is the result of the colleges' own efforts.



University of Chicago: students are flocking back to campus living.

Restrictions on alcohol, visiting hours and guests have been relaxed or abandoned, and many hostels are now mixed. Universities have added special facilities, like exercise rooms or coffee houses, which are unavailable off-campus, and the University of Utah even offers special courses in wilderness survival and downhill skiing exclusively for residential students.

More important, however, are the recession, which has cut back both the number of jobs available for students and the amount of money they receive from their parents, and the accompanying inflation, which has raised off-campus rents and meal costs.

In addition, students in many areas are finding apartments increasingly hard to get. Housing starts are substantially lower than last

year, especially in those cities which have adopted no-growth policies and stopped sewer construction.

Worst off are students in metropolitan areas like Washington and New York, where rent control has put an almost complete stop to the construction of new moderate-sized apartments for rent.

Last year, for example, Washington's American University began term with hundreds of undergraduates homeless, and was able to house them only because a local apartment complex, emptied of tenants so that the flats could be sold, was suddenly denied permission to go ahead with sales. The students moved in, but on short-term leases only, and with dorms already overcrowded the housing crisis remains acute.

More women PhDs, but little effect on job bias

from Ian Anderson

STANFORD
America's most prestigious universities are awarding more and more PhDs to women, but predominantly in the areas where women have traditionally obtained their higher degrees, according to research by two Seattle academics. They are also awarding fewer doctorates to men.

However, in some fields PhDs for women and for members of minority groups are still so infrequent that there will be virtually no improvement on university faculty recruitment in spite of affirmative action programmes, the research indicates.

This research was done by Dr Joseph McCarthy, professor of chemical engineering at the University of Washington, Seattle, and Dr Deal Wolfe, professor of public affairs. Their findings appear in *Science*, the journal of the American Association for the Advancement of Science.

Dr McCarthy and Dr Wolfe surveyed the 46 universities belonging to the Association of American Universities, which includes Cornell, Harvard, Massachusetts Institute of Technology, Princeton, Stanford and Yale. The universities supplied information on the number of doctorates conferred in each field from July 1969 to July 1972, and the number conferred or expected to be conferred from July 1972 to July 1975.

The 46 institutions, which have produced 75 per cent of all doctorates awarded in the United States, are currently awarding about 60 per cent of the yearly total, are seen as a key source of supply of new faculty. The authors suggest that, if affirmative action programmes in the United States are to succeed, these universities will need to increase the number of doctorates from women and from minority groups.

The total number of PhDs from the 46 universities for 1972-75 will be only 0.1 per cent above the figure for 1969-72—53,327 compared with 53,295, the survey shows.

This small increase is a result of substantial changes in the representation of women and minority group members. Majority (ie white) women have increased by 34 per cent to 10,451, minority men have increased by 63 per cent to 2,134 and minority women have increased by 133 per cent to 964. But doctorates for majority men are down by 5 per cent in 1972-75 to 39,773.

In the six-year span, women received about half of their doctorates in only six fields—anthropology, biology, education, health sciences, psychology and Romance languages. They continue to be poorly represented in engineering and in some of the physical sciences.

The percentage of doctorates for women was less than 10 per cent in each of the following fields: astronomy, economics, mathematics, religion, computer science, applied mathematics, geology, agriculture, atmospheric science, business administration, physics, engineering and operations research.

Also over the six-year period, all doctorates awarded to members of the four minority groups (American Indian, Asian, Black and Spanish-origin), 52 per cent were in five fields: education, engineering, health sciences, languages, and psychology. Blacks received most of the minority group PhDs in education; Asians received most of those in engineering and the natural sciences.

Drive opens to stamp out cheating

MORE and more of America's great universities and colleges are abandoning their honour codes in the face of widespread student cheating, and are instead introducing formal examination procedures and codified sanctions for offenders.

Although the large state universities, where there are tens of thousands of undergraduates and classes of over 100, have always required formal adjudication of examinations, most of the older private colleges trusted students to take exams honestly and without supervision.

However, cribbing and copying, sometimes involving large groups of students, laboratory practicals have become increasingly common. Other students are unwilling to turn in papers, and because of peer pressure against reporting to the authorities, and because penalties tend either to be severe, as at Johns Hopkins, where failure in the course is a lifetime ban, or to be too lenient, as at a student committee only after long and costly proceedings, as at Gettysburg College.

Instead, students have demanded increasingly that the system be changed. Hopkins is abandoning its code in favour of pretors at examinations after a poll in which 30 per cent of students admitted cheating, and a referendum in which the undergraduates approved changes. Gettysburg is revising its system at the students' request. Stanford is considering getting rid of its code, respectively one of the most prestigious liberal arts colleges and the greatest Catholic university, have already abolished theirs.

A major factor in the breakdown of the old system is certainly the increasing importance of high grades as students compete for scarce places in professional and post-graduate schools. Instead of obtaining a liberal education before moving to high-pressure jobs in a career where graduates are rare, today's students know that a BA is worth little.

Stanford jobs boost

STANFORD UNIVERSITY'S Business School's annual employment survey shows that this year's graduates averaged three job offers each before they left the campus.

New high for adult learners

WASHINGTON
Data released by the federal Government show record numbers of American adults participating in adult education in 1972-73. In that year, which figures exist, 15,750,000 people attended courses, nearly double the number of college students working for degrees, and 500,000 more than the number of pupils in the final four years of secondary school.

In 1957, only 13 eligible adults were involved in adult education as against one in eight now. Nearly half the participating adults in the 1972-73 survey were in occupational programmes, and Vietnam veterans who accounted for a fifth of the total, were even more likely to be making these as opposed to general education courses.

While many adult students take courses attached to colleges, universities and schools, over two million attend courses sponsored by employers, a million and a half are private vocational and business schools and several million others are attending programmes run by unions and professional associations.

In addition to formal courses, several million more attend hobby, sports and other classes run by community organizations. Together, the huge and disparate areas of adult education involves over one million staff, its clientele tends to be already fairly well educated with only 4 per cent of those taking adult education courses reporting that they had not completed high school.

Students are fairly equally divided between men and women. However, women have increased the rate of men, and total 28 per cent more than in 1969.

77 private colleges forced to close

Since 1972 some 77 private colleges have either shut their doors or agreed to exist as independent units, according to figures released by the National Council of Independent Colleges and Universities. The National Council for Education Statistics says 56 colleges have closed for good, 12 have been "merged" with large institutions and nine are now under public control.

Texas regents spark staff boycott

The appointment of Dr Lore Rogers as president of the University of Texas at Austin has brought forth a storm of disapproval not only from students and faculty in Austin but from educators throughout the country.

Dr Rogers, a 61-year-old biochemist, is the first woman to be president of a large state university, but she was appointed by the university regents despite a faculty-student advisory committee unanimously rejecting her four times.

The issue is not Dr Rogers' qualifications—though some faculty members are contending in a vote that she and other nominees are "minority" appointments, "outsiders"—but the right of faculty and students to have a say in the choice of their chief administrative officer.

The American Association of University Professors has been particularly vigorous in its denunciation of the regents' action. The AAUP argues that "the 1956 Statement of the Government of Colleges and Universities, jointly formulated by the AAUP, the American Council on Education and the Association of Governing Boards of Universities and Colleges, calls for joint effort of a most critical kind to be made when an institution chooses a new president."

Now, faculty have voted overwhelmingly to call for Dr Rogers' resignation. They are also pushing the legislative body to appoint a committee to investigate the regents' action.

West Germany

'Open University' gets under way

by Günther Kloss

West Germany's first Distance University (Fernuniversität) was officially inaugurated last week by Dr Johannes Rau, Minister of Arts, Sciences and Research for North Rhine-Westphalia. Its headquarters are in Hagen in North Rhine-Westphalia and it is now admitting its first 1,286 students.

The new institution will function as an independent, fully integrated university, with faculty and students working at different levels leading to both conventional degrees and diplomas. Initially, the university plans to offer courses in mathematics, economics and education.

It is envisaged that the university will, like any traditional institution, eventually provide research facilities for its academic staff. A major difference between it and the British Open University is that, at

least for the time being, broadcast teaching will not be used. Instead, teaching will chiefly be by means of correspondence texts, cassettes and tapes.

So far 26 study centres have been designated in towns which can offer the necessary space, are easily accessible by road and rail and have good public libraries. In a few instances, the centres form part of existing higher education institutions. Students are expected to use the facilities of these centres. Like the Open University's study centres, they will provide the opportunity for students to meet their teachers, course tutors and counsellors, and to meet fellow students. They will also serve as examination centres.

It is envisaged that a full-time student will normally study for some 40 hours a week and on average one fifth of his time will be spent in the study centre. The entire

annual study programme is planned to extend over 47 weeks—34 weeks of work at home, four weeks of courses at the centre, five weeks of examination preparation, and two weeks each for sitting the actual examination and for preparing the next year's courses.

A key function of the Fernuniversität will be to take pressure off existing universities in North Rhine-Westphalia which by the early 1980s are expected to have some 300,000 students, almost 90,000 more than at present. The Land Government is also looking for cheaper ways to provide higher education and estimates that the cost of a student place will be about one third of comparable costs at conventional universities, provided some 9,000 students register in the first phase of the university's development. The eventual student target figure, to be achieved after five years, is between 20,000 and 30,000.

Spain

Fresh clamp on campus 'militants'

from William Chislett

MADRID
A decree establishing university disciplinary committees has been signed by General Franco in an attempt to stop further strikes by teachers and students and prevent incidents such as the closing of Valladolid University (THES, March 21). The university, shut since February, reopened this week. In the past discipline was administered by deans or through direct police action.

The new committees will censure "undesirable" students and have the right to expel anyone who is considered a trouble-maker. The decree gives the committees power to take the necessary measures to maintain and restore academic order and fulfil the duties inherent in the functioning of a university. There will be no right of appeal.

Another part of the decree limits the number of times that students can re-take their examinations to four. Previously students could re-take their exams indefinitely.

This will mean that children from wealthy families, many of whom take years to pass their exams, will have to work a little harder. But it could go against the working class, whose children make up only 3 per cent of the student body. Although tuition fees are low (science subjects 2.8 a year and arts subjects 2.2), books are very expensive, libraries full and accommodation hard to find (€88 a month for an average hall of residence). In such conditions many students need several attempts to pass a subject.

Meanwhile, meetings have been taking place between professors of the various faculties in Madrid over the problem of overcrowding. Medicine's Complutense University will have an estimated 125,000 students this academic year, although it can only officially take about 100,000.

Professors are also worried about plans to build a university 30 miles outside Madrid at Alcala de Haza. Some see this as a deliberate policy of centralisation at a time when they feel more universities are needed in the provinces.

South Africa

Coloured rector under fire

from Lohs Hotz

JOHANNESBURG
Students at the Coloured University of the Western Cape—some of whom are students of the year—have been protesting against the appointment of Dr van der Ross as rector of the university last year. The students' protest was held in the first Coloured man to hold such a post in South Africa.

Now the students have become increasingly critical of the rector's role and political associations, in that some of them at any rate see a tendency to tone down their stand against racial discrimination and inequality.

In an attempt to reach an understanding on the subject Dr van der Ross drafted a document which rejected all discrimination based on race or colour as a matter of principle but which did not deny the reaction of individuals to specific situations could be a matter of personal decision.

The Students' Representative Council refused to subscribe to the document on the ground that it was in conflict with S.E.C. policy that the university should set as its goal the realisation of "the universal need for a principle" that no person qualifying for study there should be denied admission "because of race."

Mexico

Student numbers to be limited to 60,000

from Lohs Hotz

MEXICO CITY
The new Metropolitan University in Mexico City, which will have four campuses in the city, will limit its student body to 60,000 when it is operating at maximum capacity in 1978.

The university currently has 4,000 students with an additional 4,000 waiting classes at the end of last month. Tuition fees for the coming year at the National Autonomous University are to be pegged. To meet the rising costs an increase in the Government subsidy of 2.8 billion pesos (€900) is being sought.

Norway

Sex equality chances of women

from Mike Duckenfield

Women applying for university and college jobs ultimately filled by men are likely to be given the right to demand written statements from employers telling them what educational and other qualifications were possessed by the successful applicants.

The right, which would also extend to men who were passed over in favour of women, could wield a major influence in opening up more senior teaching and research jobs to women. A recent survey by the Hergen University found that only 2 per cent of Norway's university teaching staff were women.

The proposal is one of several to promote equality between the sexes in a Bill recently presented to the Storting by the Norwegian Government.

Only the second of its kind, the Bill also seeks to give women and men working for the same or similar jobs equal opportunities for training, further education and leave of absence for training.

Although the Bill aims to promote equality between the sexes, the emphasis is on improving the posi-

chances of women

tion of women. It is not yet clear, however, whether the Bill might affect positive discrimination of the kind at present applied to achieve a better balance between the sexes, for instance, in recruiting more men into primary and pre-school teaching.

The proposed law would be mainly enforced by a specially appointed ombudsman and a seven-member board of appeals, two members of which would be appointed by the Federation of Trade Unions and two by the Employers' Confederation.

Australia

Colleges fear cuts all round after modest Budget rises

from John Kirkaldy

SYDNEY
Increasing fears are being expressed in Australia's higher education circles that proposed cuts in expenditure will lead to reductions in staff, students and research. The commissions on Universities and Advanced Education, for example, have asked for A\$1,780m and A\$450m respectively for the next three years but this year's Budget has allocated only A\$510m to the universities—a rise of A\$8m in the coming year, compared with A\$208m rise the year before. Colleges of Advanced Education will receive A\$4m more than the A\$360m they got last year.

Rumours of cutbacks in staff and equipment abound. In a recent letter to the heads of schools at the University of New South Wales, Dr Rupert Rogers, the vice-chancellor asked them not to enter "into any further long-term financial commitments... The practical effect of this decision will be that advertising and staff vacancies will cease for the time being and we will avoid entering into any substantial commitment to purchase equipment."

The Budget temporarily abandoned the traditional expenditure scheme and asked the commissions to make further reports by next March for a new triennial starting on January 1, 1977. With inflation running at an annual figure of 17.1 per cent, unemployment rising, most observers think it unlikely that increased spending in real terms is possible.

The long-term future is bleak. "Universities will be in a very serious position if the reported cuts are made," said Professor B. K. Williams, vice-chancellor of Sydney University. "We would have no choice but to reduce the intake of students and staff."

This situation could affect British academics. Lecturers earn between A\$11,500 to A\$15,000 (about £6,750 to £8,250), while professors can earn A\$20,000. If the staff situation does become more tight there will be strong pressure to reduce or cut out altogether these migrants.

India

UGC boosts in-service work

from A. S. Abraham

BOMBAY
The University Grants Commission is to award teachers special fellowships to enable them to get the advanced research qualifications they are now required to possess if they are to keep their jobs.

At the same time as the UGC revised teachers' pay-scales (although not all provincial governments, responsible for education, have yet accepted them), it laid down fresh obligations for them. Previously, during the emergency, when voluntary work was unpaid and part of the job. More importantly, until now, an ordinary MA was enough to become a lecturer; now, new recruits must have a PhD, or at least an MPHil or an MPhil, both higher research degrees.

The fellowships are meant for teachers in services who do not have advanced qualifications. They will have to get them within five years from the day the higher pay scales come into effect. Those under 35 will be awarded three-year fellowships; those between 35 and 45 one-year grants.

During this period, they will be on study leave and, since the college which employs them will sponsor them, they will have to undertake to work for it for at least five years from the time they rejoin. When they come back, they will get the increase in salaries and increments to which they would normally have been entitled.

Canada

Northerners left out in cold

Higher education opportunities for students from the Canadian North are inadequate, according to a report by the Association of Universities and Colleges of Canada (AUCC).

A key problem is the psychological and cultural differences between northern students and those in urban centres and large institutions in the south, where most have to study.

The report, *Northern People and Higher Education: Realities and Possibilities*, was commissioned by the AUCC to investigate the ways in which higher education affects the peoples of northern Canada and to assess the role of Canadian universities in relation to northern education and research.

P.O. BOX 811 - AUSTIN, TEXAS 78768

Putting the blame on society

Adverse

Derek Brewer

the electors of Tamworth constitu-

Published in U.S.A. by Humanities Press, Atlantic Highlands, N.J.

BOOKS

Taking a stand on compromise rather than principle

In support of his thesis, Professor Moodie examined the writings of Paul Kruger, President of the African Republic from 1881 to 1900. The influence of Calvin's theology on Kruger's interpretation of his people's struggle is clearly demonstrated, though less emphasis is put on "transvaal republicanism" which ultimately to give way after his death to a broader pan-Afrikaner movement embracing the Cape, and which found a unifying factor in the cause of the Afrikaans language.

Perhaps the most original contribution is that dealing with the influence of theological developments in Holland during the nineteenth century on Afrikaner religious and political thought. This is a neglected area in the bibliography. English-speaking scholars have all too often assumed that the Afrikaner version of Calvinism was a monolithic force, free of divine and debate. This was rarely, if ever, the case, so Professor Moodie demonstrates with a wealth of detail and subtle argument which adds a new dimension to our thinking about the religious husk of Afrikaner nationalism.

The remaining chapters deal with the growth of Afrikaner nationalism, the cultural basis of Afrikaner politics, the developments and influence of the Ossewa Brandwag and events after the Second World War. These particular chapters are concerned with the originality and placed firmly in the context of a developing and ultimately triumphant civil religion to which it is difficult to do justice in a brief review.

The author deserves our congratulations for a original and scholarly work which will interest and stimulate theorists in a wide range of disciplines.

J. E. S. MOORE

Oxford University Press

Constable

Oxford University Press

usually leads to oscillations with peaks more than five generations apart, whereas the blowfly peaks are every alternate generation. This is probably the chapter is followed by a chapter on the ecology of a loved, rather than the ecology of a loved, chapter on estimating the ages of plant and animal populations and by two chapters on spatial patterns.

of publications in 1971.

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HUTCHINSON

BOOKS

Exemplar of socialism's problem

The Second Chinese Revolution
by K. S. Karol
translated by Mervyn Jones
Cape, £8.00
ISBN 0 224 01117 1
Liu Shao-chi and the Chinese Cultural Revolution
by Lowell Dittmer
University of California Press, £7.15
ISBN 0 520 02574 1

The Cultural Revolution, ten years old this autumn, opened new doors to our understanding of the Chinese road to socialism. By now the cruder western interpretations have mostly been jettisoned. Hardly any one still sees it as a lawless assault on "power struggle" or an attempted military coup (or from a very different perspective) simply a revolt of the true left against the state bureaucracy. There is now a fairly general agreement that the Cultural Revolution was, above all, an attempt to make socialism work in everyday life—in the "human relations" as well as in the more familiar socialist institutions.

Many Chinese scholars in the West, untrapped in the proclivities imposed upon them by two decades of Cold War scholarship, still find it hard to say this very clearly. Karol, first a socialist, second a journalist, and not a Chinese scholar, does it very well. He provides a vivid and generally reliable account of the Cultural Revolution, buttressed by insights from his own two visits to China in 1965 and 1971. But beyond this, he has succeeded in the much more significant task of placing the Chinese experience within the context of the twentieth-century global revolution.

China, Karol writes, has "posed a fresh way most of the problems of socialism which are ours too". It really comes down to one problem, which is how to continue to revolutionize society after political revolution. Karol's answer is that it seems a relatively easy task to carry out "socialist transformation". If private ownership of the means of production and distribution was the root of capitalist

evil, then it should suffice to place them in the hands of the collective or of the state.

The ugly experiences of the Soviet Union upset the old determinist view that this transition to socialism must inevitably be completed, provided only that the enemies of the state were kept at bay and that the productive forces (meaning, mostly heavy industry) were fully developed.

The harsh paradox, as Karol describes it, is that while the working class may overthrow the political power of the bourgeoisie "at a stroke", it cannot immediately abolish the division of labour upon which the power was based. It is out running the risk of "completely destroying the apparatus of production". So workers will still receive unequal rewards, enterprises will still be tempted to compete for materials and markets, technical and political bureaucracies will entrench themselves and so on.

From the Soviet failure Mao has drawn the lesson that "growth should speed up and not retard the social revolution". The phrase is Karol's, but like the rest of his perceptive analysis it echoes Mao's own writings on political economy—even though these have only come to light in an "unofficial" collection since *The Second Chinese Revolution* was written.

Mao's views on how to build socialism were already stated in theory, Karol believes, by the rest of the leadership before the Cultural Revolution. But in practice the Maoist approach was bound to threaten the dominance of a party administration which, however well-intentioned, was still "clad from the people by the logic of facts".

The Cultural Revolution, as Karol reminds us, was a mass movement, intended (whatever the Chinese now say) to bring about a permanent and popular transformation of established authority. It failed in this respect, and in a number of other ways. Karol's book is a valuable scholarly contribution to the study of the revolution and the Communist Party again ended up "holding all the strong points in the institutional structure of China". Yet the process has worked subtly: revolutions

that change nothing are an impossibility, and the Chinese working-class has recently become much more assertive.

Karol is far from being an uncritical friend of the Chinese, and more accurately of their official spokesmen and this adds strength to his book. He is totally unimpressed by their account of the Lin Biao affair, cynical towards the reappearance of so many former party and army bosses—"walking like ghosts in the park"—and sceptical on the grosser aspects of China's new diplomacy.

The thrust of Dittmer's equally lengthy but more limited study of Liu Shao-chi and the Chinese Cultural Revolution is conveyed in his subtitle, "The politics of mass criticism". The politics of mass criticism sounds a promising approach and raises a lot of important questions.

Does criticism by, and to the rest of, the "masses" still have such a positive effect as it achieved during the early years of the revolution? How well does it work as a tool of democracy inside as well as outside the Communist Party? How is someone—say a senior "cadre"—like the rebellious Vice-Premier Teng Hsiao-ping—to be treated? How well does it work as a tool of democracy inside as well as outside the Communist Party? How is someone—say a senior "cadre"—like the rebellious Vice-Premier Teng Hsiao-ping—to be treated?

Dittmer tackles these questions in the unhappy but almost obligatory jargon of the American-trained social scientist. His aim, he says, is to provide "a useful methodological tool for the declassification of Chinese criticisms". He proceeds in his task with the aid of models and tables, including one which purports "the intra-monthly criticism depletion propensity for Liu Shao-chi". Elsewhere in the book there is some valuable scholarship in its well-documented analysis of the life of Liu Shao-chi and his downfall, and in a debatable but stimulating comparison between Liu and Mao. This is a welcome addition to the literature on the revolution and the Communist Party again ended up "holding all the strong points in the institutional structure of China". Yet the process has worked subtly: revolutions

John Gitting

The Bangladesh story

South Asian Crisis: India-Pakistan
Bangladesh
by Robert Jackson
Chatto & Windus, £4.00
ISBN 0 7011 2053 0

Pakistan was preoccupied with Bangladesh from the moment of its own birth in south Asia's first partition in 1947, and no account that begins with the crisis of 1965-71, when Bangladesh was born, could be adequate. Robert Jackson looks back to the third century, as he begins his account of the second partition but the brief chapter he devotes to developments before March 26, 1971, is too cursory, and imbalances the rest of the book.

Like any other form of historical writing, contemporary history requires careful analysis of textual sources, and Jackson is good in that regard. Coming new to south Asia, he reads widely, and cites his written sources carefully. But contemporary history demands additional techniques, and Jackson's additional techniques are not always successful. He leaves the archives open as he has found his bearings there and pursue his inquiries to the field. Then the skills of the historian become secondary and those of the political journalist are required. Interviewing, cross-examining and cross-checking with witnesses very much unwelcome persistence to investigate, unwillingness to "leave mysteries unexplained" are what every informant, contributor, a piece of the whole, containing an element of the inaccurate or false because of his own subjective involvement. In this area Jackson was not so successful, and his book is consequently deficient.

Jackson visited India, Pakistan and Bangladesh in March/April 1972, but he refers to that tour only in passing and gives no details of what he saw or heard. He is given by the governments concerned, whom he interviewed—or whom he was not free to interview, what kind of people, how

forthcoming, radiant, frank or disingenuous he found his own sources—such information, this contemporary historian's equivalent of a bibliography, is not provided. But Jackson's text shows clearly enough that he found Indian informants both more forthcoming and more persuasive than those he met in Pakistan.

The outline of the Bangladesh story's first chapter is sharp. On March 26, 1971, the Pakistan army attempted to repress, with draconian severity, a political movement, in the eastern province of East Pakistan, which the government believed to be secessionist—and which had in fact by that date achieved the *de facto* secession of Pakistan's eastern province. The army's action came late. The commander in the east, General Yahya Khan, had for months been urging the necessity of forceful suppression; but when order authorizing such action was issued, on March 2, he informed President Yahya that they came too late. The political situation was beyond recovery by military means. General Yahya was sacked on the 12th, to be replaced by a soldier of the "three not to reason why" mould, General Tikka Khan. (Jackson makes no allusion to this background.)

Late as it came, Pakistan's military action was not without success. As Jackson notes, and would have kept alive—at least would have kept alive—the original Pakistan for probably a few more years. But India's intervention made the task of holding Pakistan together by force impossible.

According to published, authoritative reports from New Delhi at the time (apparently misused by Jackson), the Indian cabinet took the decision to intervene militarily in East Pakistan if that was necessary as late as April, 1971. That was well before the mass influx of refugees which India was given as justification for her intervention. Jackson notes that India began to support Bengali liberation forces, the

Mukti Bahini, very early; but he nowhere makes clear that the Mukti Bahini was Indian-organized, Indian-trained, Indian-armed and Indian-led. Even that might not be the whole of it. Mr. Merwin Dasset, in an interview last summer, might have been asked, in fact, did Mukti Bahini numbered thousands of Indian soldiers, or of uniform.

Jackson's failure to detail India's progressive military involvement is another hint to the reader that Yahya Khan of following a progressive "strategy of escalation"—what he own account clearly shows that it was India's strategy to build up the political, diplomatic and military pressure on Pakistan until the transition of East Pakistan into Bangladesh had been achieved. The conspiracy-theory of Jackson's perception in this crucial regard reaches its highest point when he writes that it was Pakistan's own fault that it was "undermined" by the full weight of India's military resources against East Pakistan. When President Yahya is ordered that half-hearted troops to the west Indian troops were already operating deep inside East Pakistan openly and in force, Yahya merely declared a second front in the undeclared but already raging Indo-Pakistan war.

There are similar failings in the Jackson's treatment of the Bengali League movement in East Pakistan. He notes, for example, that Shahnaj, for instance, programme included in the useful appendix would ante the virtual collapse of East Pakistan if it applied to it. "Full rigour"—but he does not observe that Shahnaj might publicly declare that the Soviet not to have that full rigour.

Jackson's book has high analytical lucidity, a strong narrative and full documentation, but it is more balanced and definitive than in fact it is.

Neville Maxwell

BOOKS

Slaving over a hot country

Domestic Slavery in West Africa: A Particular Reference to the Sierra Leone Protectorate, 1896-1927
by John Grace
Muller, £5.50
ISBN 0 584 10416 5

Historians of pre-colonial politics in sub-Saharan Africa have become increasingly concerned with slavery as a key institution in their economic, social and political development. But, as Dr Grace remarks in his preface, "slavery" is a highly emotive word. For people of European descent, it immediately evokes a picture of the injustice and cruelty involved in exploiting African slaves as gang labourers on American plantations, and in recruiting them through the Atlantic slave trade. Such a picture was automatically transferred to Africa as a result of the propaganda, first of the anti-slave trade campaigners, and then of the imperialists who wanted to redeem Africa from what they supposed to be its innate barbarism and violence. The resources for the benefit of mankind—not least of themselves.

The evidence now becoming available suggests that what was involved in pre-colonial African society was a system, or a series of systems, which were altogether more subtle and socially pervasive than is suggested by the simple stereotype with its clear-cut morality. It would seem that the argo of African systems of servitude lies in an acute shortage of manpower to meet the needs of emerging ruling classes. Often these were seeking to respond to new stimuli, for example, the demands of foreign or intra-African trade, or the need for security and defence in the face of predatory neighbours. Agriculture and animal husbandry, the essential means to support substantial stable populations, happened to be "ploughed" in more temperate lands, and tropical Africans experienced considerable



Slaves were forced to dance to keep them healthy on the long sea voyages.

able problems in adapting them to their own environments. Thus nineteenth-century African population densities were no greater than those of western Europe about the tenth century, which, as Marc Bloch showed, were crucial to the evolution of feudal society. In Africa, kings or would-be kings and their followers saw no alternative but to impress into their service men and women from weaker village societies, to produce surpluses of trade goods, to supply and sustain the court and its administrators, and to provide the soldiers and administrators, traders, and carriers needed to maintain the state and its economy.

All this is known to Dr Grace, though he has chosen to call the resultant systems of social dependence "domestic slavery". This is an inapt term taken from the language

of the early colonial officials who had to grapple (or, as he explains, close not to grapple) with a system which ran through the whole of the African continent might be governed and their wealth exploited. It was neither exclusively domestic (and, in so far as it was, people of slave descent within a household were not necessarily assimilated to kinfolk), nor was it wholly slavery, including as it did a whole series of situations of dependency for which sorcery, vassalage, clientage might be better words (and even a slave could achieve positions of authority, trust and wealth, even if most slaves did not).

But the title of Dr Grace's book is sadly misleading. More than half the book is not about institutions of slavery in West Africa. It is about British

attitudes to them after slavery had become illegal in the British empire in 1833; about the entanglement of these attitudes with the processes resulting in the proclamation of the Sierra Leone Protectorate in 1896, and how these helped occasion the "hut tax" rebellion two years later; and about what the British did or did not do about slavery in this protectorate until they finally outlawed it in 1927. Much of what Dr Grace has to say on these topics will hardly be new to any keen student of Sierra Leone history (and, for lack of appropriate maps, difficult for others to follow), and it will certainly disappoint anyone seeking new light on the place of slavery in West African history and society.

In only two out of six chapters does Dr Grace directly approach the subject announced in his title. There is a well-balanced, but short, intro-

ductory chapter on domestic slavery in West Africa in the nineteenth century. And it is difficult to know, for example, what the reader will make of a concluding generalization that "the rights of slaves were so limited as to be non-existent. They could not own land or other property... when earlier it has been said that 'The vast majority of West African domestic slaves lived safer and happier lives than Colons, Bahamas or the slaves...'. In West Africa generally, the condition of slavery among the five was not degrading.... The two slave owned property—even other slaves—and... was treated as a member of the family."

Difficulties of this kind also occur in a longer and usefully documented later chapter on domestic slavery in the Sierra Leone Protectorate during the twentieth century, i.e. under British overlordship. Here, for example, there are contemporary observations about the happy state of slaves in Mouding and Fula slave villages. (But is this domestic slavery?) There is also a 1923 official estimate that 15 per cent of the population were slaves. This may be compared with an earlier remark, going to about 1898, "Little was known about the situation in the hinterland of Sierra Leone even though about half the population were slaves."

This disappointing book, Dr Grace, like the early abolitionists, finds slavery—or perhaps its resolved stereotype—totally detestable (and rightly so). But he is a historian, not an abolitionist, and he should not have allowed his moral judgment to interfere with his professional duty. As it is, he has chosen to concentrate on British slavery in Sierra Leone rather than to attempt to explain why and how it had become such a vital institution in the African societies that Europeans in their turn had come to rule and to exploit.

J. D. Fage

Begin at the begetting

Family Planning in India: Diffusion and Policy
by Piers M. Blaikie
Edward Arnold, £10.00
ISBN 0 7131 5760 1

A decade or so ago it was claimed that the obvious solution to the population explosion, and most of the world's ills, lay in the spread of family planning. A spate of national censuses, enthusiastically aggregated by international agencies, had revealed the exponential increase, caused largely by rapidly declining mortality in the Third World. This could only be offset by rapid fertility decline, hence the need to spread the gospel of family planning.

It all seemed so straightforward at the aggregate level, but the diversity of individual countries poses much more difficult problems. Not only are population densities, structures and growth rates extremely diverse, but their interrelationships with economic systems, social customs and political regimes make attitudes and solutions differ markedly from one part of the world to another, a fact highlighted at the Bucharest conference in World Population Year. Macromodels may contrast sharply with micro-reality, and thus the western-inspired family planning movement has been mixed fortunes, ranging from conspicuous success to outright failure.

Of course, in terms of absolute numbers the key challenges are India, China, and India. India, more than one-third of mankind, Demographically China is closed to external interference, and is still largely an enigma. India, on the other hand, has 600 million inhabitants, increasing by about 15 million a year, have presented the major challenge to the family planning movement. This volume, however, is certainly a distinctive contribution, being a locational analysis of the programme in two of the more remote and backward districts in northern Bihar, one of the poorest states in

India, where health care is skeletal and infant mortality high. In Purnea district alone there are more than four million people—so many as 100,000 in some villages.

The important feature of Piers Blaikie's work is that he focuses on the spatial diffusion of family planning at a variety of scales, for multi-scale approaches are rare in population studies and only recently has there been growing awareness of the problems of scale linkages. He starts with the individual decision-maker's scale and the micro-regional scale, using a questionnaire with small strata sample of 178 couples, and then proceeds to analyse the district scale and finally the multi-district or regional scale, where the author relates how poorer rural areas in India are neglected by family planning services and research.

Piers Blaikie contends that spatial diffusion studies have neglected the inter-village or micro-regional level where the important spatial and social considerations are of the individual, the family, the kinship group and the village. He says that spatial diffusion theory should suggest optimum locations for its agents of change and predict which population groups would benefit from such locations. In short he is concerned with the planning implications of his studies.

In essence, this is an interesting and well-organized research monograph, which shows the favour of best students of family planning and spatial diffusion. The author's propensity for terminology and abbreviations induces an occasional astounding sentence such as: "Thus, targets for vaccination, long-term research on state law and staff vacancies allocated within rural health care units by the Centre for every IHC should have at least a BFW or AFW, and also an ANM or a TB, but the additionally have both the latter." Moreover, most of the numerous maps are no more than intricate patterns of symbols which convey little visual impression. This is a book for agents of change rather than the masses, Indian or otherwise.

John I. Clarke

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BOOKS

Power of the classroom

Education, Society and Development: New Perspectives from Kenya edited by David Court and Dhaman Ghai
Oxford University Press, £6.40
ISBN 0 19 572346 5

Education in Third World countries, particularly since independence, has everywhere been regarded as a major key to national, social and economic development. Enormous faith and resources have been poured into it by almost every developing nation. During the United Nations development decade of the 1960s it was fondly hoped that the positive connexion between education and development would be simply proven and that the huge resources of money, personnel and international aid devoted to educational expansion would have helped at least some of the developing countries reach the "take-off" stage in development. Unfortunately this has not happened and although there is still enormous faith in the power of education to achieve national progress, there is also increasing disillusion and scepticism about how this can be achieved and how long the process is likely to take.

The disillusion has resulted partly from the lack of convincing evidence from individual countries about the precise ways in which education can assist development.

It is becoming increasingly clear that until more precise research findings become available about the process of education works in the context of particular societies and how this affects national development there will be little doubt that the popular demand for education would remain unfulfilled.

The book covers training, recruitment and employment, the structure and culture of Kenyan education, the issue of equity and alter-

ation there will be little progress towards the desired goals.

This is the great value of *Education, Society and Development*, based on empirical research carried out mainly by members of the Institute of Development Studies, Nairobi, or by international scholars associated with it. It documents precisely how the present educational system of Kenya is operating in terms of development and how it is contributing to or more often negating progress towards accepted individual and national goals. It also offers us something more. Kenya has long been a country where individual initiatives in education have been particularly active and, in recent years, this has been much exemplified in the national self-help spirit of "harambee". ("Let us pull together"). Local initiatives have started "harambee" secondary schools, "harambee" village polytechnics and "harambee" regional institutes of technology. In an attempt to provide educational facilities which are beyond the capacity of government alone to provide.

Not only do these constitute a valuable addition to government efforts, but they represent also means by which local communities can break out of the vicious circle of irrelevant systems of education, inherited from abroad—something which governments alone seem incapable of doing, largely through the inherent consequences. This is not to say, of course, that local initiatives of this sort do not produce problems for the central government of control and integration into the national system, but without them there is little doubt that the popular demand for education would remain unfulfilled.

The book covers training, recruitment and employment, the structure and culture of Kenyan education, the issue of equity and alter-

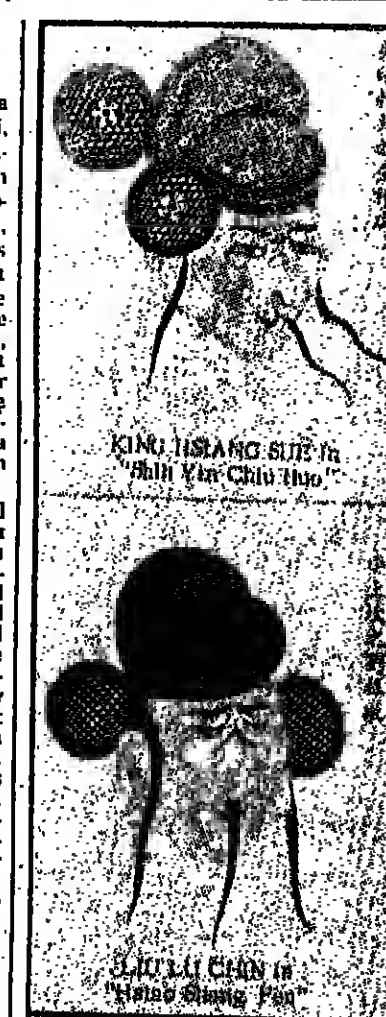
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P. C. C. EVANS



Example of make-up worn by Chinese actors in Peking Opera. From "The Chinese Theatre in Modern Times" by Colin Mackerras, published by Thames & Hudson at £6.75.

Foreign money

Appraising Foreign Investment in Developing Countries by Deepak Lal
Helmemann, £4.00
ISBN 0 435 5460 1

Thirty years ago it was taken for granted that private foreign investment would be welcomed in developing areas that were short of capital and enterprise and managerial and technical skills. Nowadays governments in these areas are expected carefully to appraise proposals for such investment so as to establish their "social profitability" before allowing them to be executed. The difference is not the result of changing attitudes toward foreign investors who have attracted suspicion and hostility. Nor does it follow mainly from better understanding of indirect consequences of foreign investment for income distribution, consumption patterns, indigenous enterprise and technology—effects which have lately attracted attention but were not deemed of much importance in the case-studies contained in this book.

The difference is rather the result of the circumstance that foreign investment, instead of being merely welcomed, has been induced by governments of developing countries; it has become associated with privileges such as tax remission, cheap labour, sometimes monopoly rights, and powers, and even tariff protection. The rule of law does not apply. Investments result from ad hoc bargaining between foreign companies and government, each exploiting the other to the best of its ability. The need for approval of proposed investments is therefore the need to ensure that what is conceded to the foreign company does not exceed in value the measurable gains accruing locally to its activities. As Dr Lal observes, "the social profitability of the host country varies inversely with the degree of effective protection offered, while the private profitability varies directly"; hence there are two limiting degrees of success: where the host country is a free market, the host country obviously tries to approach the lower limit. Appraisers of the social value of foreign investment would have little to do in a world in which businesses were free to establish where they chose and had entirely to earn their living.

The book lays down criteria for appraising foreign investment which represent an extension of the social cost-benefit analysis of Little and Mirrlees in volume two of *Development in Developing Countries* (1968). Familiarity with the Manual appears to be assumed in the reader. Those guidelines are applied to assess the desirability of actual or proposed foreign investment in some studies in the appendix and a more diverse selection of activities in Kenya, using data collected by Dr Lal's research associates, Paul Hare, Martin Chacha and Jeffrey Thompson. Some ground information is included about the Kenyan economy and foreign investment in the two countries. As usual in work of this kind, the methodology of the studies is more instructive than the numerical results which they contain. The several arbitrary assumptions required to produce them, the work is introduced by a general review of the dimensions, motives and effects of foreign investment, and a less useful discussion of economic aspects of controversy over such investments.

The publishers regard the book as useful in teaching development economics and training administrators in developing countries. Dr Lal himself writes, "It provides one of the most accessible and useful foreign investment studies to planners, decision-makers in developing countries. Neither a volume, nor well founded. The authors have taken no pains to instruct the uninformed. What they have produced is really a research report, padded into a book with a secondary and more general introduction. It will be mainly of interest exclusively of specialists in similar research interests."

Douglas R. ...

Helped to help themselves

Aid and Dependence: British Aid in Malawi by Kathryn Morton
Croom Helm, in association with the Overseas Development Institute, £5.95
ISBN 0 85664 024 7

This is the first of a series of studies of British aid to individual countries which the Overseas Development Institute are undertaking with financial assistance from the Social Science Research Council. It deals with British aid to Malawi; others to follow include Botswana, Lesotho, Swaziland and Kenya. As no reasons have been given for the choice of these countries, one cannot be sure whether the title of this volume represents an evaluation of the overall theme in the context of a specific country, or simply the author's choice. It is the former that the series should make interesting reading.

Dependence, is a fashionable concept at the moment. Being aid it operates at different levels and in different forms—political, economic, cultural and even intellectual. It has also led to a considerable flow of literature, which, on one number of hypotheses, is Malawi more or less dependent on British aid, and the British aid is more than sufficient to keep it dependent, and if so, to what extent is this increased dependence the result of the aid? British aid policy operating through its aid programme? To many people such questions are superfluous, in the context of Malawi. This was precisely what British aid was intended to achieve, and has in fact done. To others, among whom the author of the present volume must be counted, the creation of Malawi's post-independence aid policy is the result of British aid.

The central proposition of Kathryn Morton's study is that Malawi has done very well since independence, thanks mainly to a favourable run of British aid. A favourable run of British aid, economic circumstances and the political leadership of Dr Banda. This is all very good and true, but it does not tell us very much about the country's independence or

what is more important, its development prospects. At least what it suggests may not entirely accord with what the author has in mind. To build a future without aid, but necessarily budgetary aid alone, but all aid from whatever source it comes, would surely be one of the firmest indications of Malawi's independence.

However, the author seems to gauge that British aid is being phased out. She regards this primarily because British aid played a crucial role in Malawi's development since independence, but also because there is a great and growing need for more aid. Unfortunately, she does not agree that this is an argument with the concept and consequences of dependence.

In fact she does not delve into the theoretical constructs and criticisms of the concept of dependence. Consequently, anyone who hopes to find here a systematic evaluation of the effects of aid on dependence, or vice versa, is going to be disappointed. What she will get is a fairly straightforward factual account of the British aid programme in Malawi since independence and an equally straightforward view of the effects of aid on the economy of that country. There really is not enough analysis or evidence to suggest that Malawi is more than a "dependent" country, and since independence has been a period of growth and development, not a period of stagnation. What happens next? How long will this run of good luck last? Will Malawi be able to build on the successes of the past decade, or will the whole brittle political and economic structure collapse after Dr Banda goes? These are just some of the questions which the author could well have addressed, but in order to satisfy one of the main objectives of her study, namely, to show that Malawi's independence holds for other countries.

However, this is a useful book. It is well documented and adequately researched. It makes easy reading and it also provides a lot of statistical data and new material which anyone working on Malawi will be glad to have available. But it might perhaps be a good idea to include some more of the country's independence or

George Abbott

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Political Structure in a Changing Sinhalese Village
MARGUERITE S. ROBINSON

CAMBRIDGE UNIVERSITY PRESS

Classified Advertisements

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UNIVERSITY of IFE
NIGERIA

Applications are invited for the following posts in the DEPARTMENT OF CHEMISTRY:

(a) RESEARCH PROFESSOR
Applicants must have a good honours degree and special interest in inorganic spectroscopy and a strong background in group theory and/or thermodynamics especially electrochemistry and electrokinetics. The appointee will be expected to devote most of his time to the development of Physical/Inorganic Chemistry research to the department.

(b) LECTURERS OR RESEARCH FELLOWS IN INORGANIC CHEMISTRY
Applicants should have a good honours degree and a research Ph.D. with research interests in synthetic and structural studies in main group chemistry or transition metal chemistry or organometallic chemistry. Research experience in the chemistry will be advantageous.

(c) LECTURERS OR RESEARCH FELLOWS IN ORGANIC CHEMISTRY
Applicants should possess a Ph.D. with interest and demonstrable research experience in either organic spectroscopy. In particular, mass NMR spectra of complex molecules in natural products chemistry or physical organic chemistry and stereochemistry. This appointee will be expected to teach advanced undergraduate and graduate courses in these fields.

SALARY SCALE: (a) N1,730 to N11,025 per annum (£6,021 to £3,560 per annum, sterling); (b) and (c) N5,350 to N6,430 per annum (£1,690 to £2,000 per annum, sterling). (21 sterling = N1,400). The British Government may supplement salaries in appropriate cases. Family allowances, medical and superannuation schemes, various allowances and regular overseas leave. Detailed applications (two copies), including a curriculum vitae and naming three referees, should be forwarded by air to the Registrar, University of IFE, Ile-Ife, Nigeria.

Applicants resident in U.K. should also send a copy to the University Council, 90/91 Tottenham Court Road, London W1P 0BT. Further particulars may be obtained from either address.

The British Council

Invites applications for the following posts:

English Instructor (Qatar)
Faculty of Education, Doha
Degree to English with postgraduate TEFL qualification and good experience.
Salary £15,110-£16,307 p.a. tax free.
Benefits: free furnished accommodation; car allowance; free medical services; pensionable; 75 AU 21-22 years. Three-year contract, renewable.

Lecturer in English (Peru)
National University of Trujillo
Graduate (man preferred) with TEFL qualification and experience.
Salary £3,885-£4,264 p.a. tax free.
Benefits: free furnished accommodation; free furnished accommodation; medical scheme; employer's pension of UK superannuation. 75 AU 117

Return fares are paid. Local contracts are guaranteed by the British Council.

Please write, briefly stating qualifications and length of appropriate experience; quoting relevant reference number for further details and an application form to The British Council (Appointments), 65, Dares Street, London WC2A 2AA

UNIVERSITY OF ZAMBIA

Applications are invited for the following posts in the

CENTRE FOR CONTINUING EDUCATION:

A. Correspondence Studies Department
1. SENIOR LECTURER/LECTURER, and HEAD of DEPARTMENT of CORRESPONDENCE STUDIES
2. LECTURER in CORRESPONDENCE STUDIES ADMINISTRATION

B. Adult Education and In-Service Training Department
3. SENIOR LECTURER/LECTURER in TEACHER EDUCATION ORGANIZATION and ADMINISTRATION, and GENERAL METHODOLOGY
4. SENIOR LECTURER/LECTURER in TEACHER EDUCATION and ENVIRONMENTAL SCIENCE
5. SENIOR LECTURER/LECTURER in TEACHER EDUCATION and MATHEMATICS

C. Mass Communication Department
6. SENIOR LECTURER/LECTURER in BROADCASTING and TELEVISION WORK

D. Other Staff
7. LECTURERS/RESIDENT TUTORS in the PROVINCES (Three Posts)

For all posts, applicants must be either qualified adult educators or teacher educators with a degree or equivalent qualification in humanities, social sciences, education, or a related discipline, as well as being in possession of a higher degree in either Adult or Continuing Education, or Education, as may be relevant, or in the subject area of the appointment. For posts in Section D, experience in a College or Department is highly desirable.

SALARY SCALE: SENIOR LECTURER K5,000-K6,000 p.a.; LECTURER K4,000-K5,000 p.a. (1:1 sterling = K1.00). The British Government may supplement salary in appropriate cases. Family allowances, medical and superannuation schemes, various allowances, superannuation and medical leave schemes. Detailed applications (2 copies) including a curriculum vitae and naming three referees, should be sent by air to the Registrar, University of Zambia, P.O. Box 2279, Lusaka, Zambia.

Applicants resident in U.K. should also send a copy to the University Council, 90/91 Tottenham Court Road, London W1P 0BT. Further particulars may be obtained from either address.

THE UNIVERSITY OF NEW SOUTH WALES

POSTGRADUATE RESEARCH SCHOLARSHIPS
Applications are invited for the following posts: (a) 1978 Academic year, 1978-79, 1979-80, 1980-81, 1981-82, 1982-83, 1983-84, 1984-85, 1985-86, 1986-87, 1987-88, 1988-89, 1989-90, 1990-91, 1991-92, 1992-93, 1993-94, 1994-95, 1995-96, 1996-97, 1997-98, 1998-99, 1999-00, 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, 2024-25, 2025-26, 2026-27, 2027-28, 2028-29, 2029-30, 2030-31, 2031-32, 2032-33, 2033-34, 2034-35, 2035-36, 2036-37, 2037-38, 2038-39, 2039-40, 2040-41, 2041-42, 2042-43, 2043-44, 2044-45, 2045-46, 2046-47, 2047-48, 2048-49, 2049-50, 2050-51, 2051-52, 2052-53, 2053-54, 2054-55, 2055-56, 2056-57, 2057-58, 2058-59, 2059-60, 2060-61, 2061-62, 2062-63, 2063-64, 2064-65, 2065-66, 2066-67, 2067-68, 2068-69, 2069-70, 2070-71, 2071-72, 2072-73, 2073-74, 2074-75, 2075-76, 2076-77, 2077-78, 2078-79, 2079-80, 2080-81, 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Polytechnics continued

ULSTER COLLEGE
THE NORTHERN IRELAND POLYTECHNIC
Faculty of Technology

PRINCIPAL LECTURER—BUILDING

Applicants should be graduates and/or professionally qualified and should have had teaching experience at degree level and industrial or research experience in the field of building technology and management.

LECTURER II—BUILDING TECHNOLOGY

Applicants should have a sound knowledge and understanding of the principles, factors and requirements which influence the design and construction of buildings and be either graduates or professionally qualified.

LECTURER II—PLASTICS TECHNOLOGY

Applicants should have a degree or an equivalent qualification. Industrial and lecturing experience in the fields of materials science, fabrication or utilisation are essential. In particular, experience in the fields of general plastic processing, fibre technology or rubber technology would be an advantage. Corporate membership of the Institute of Mechanical Engineering is required.

The successful applicant will have the opportunity to teach on a variety of courses from HNC to degree level and will be expected to carry out research.

Faculty of the Arts

LECTURER II or LECTURER I—POLITICS

To contribute to the teaching of Politics in the Combined Humanities, Social Sciences and Business Studies degrees. Candidates should have a good honours degree and preferably postgraduate and/or relevant teaching experience.

Salary Scales: Principal Lecturer £5,840-£8,642/£7,578

Lecturer II £3,279-£5,493

Lecturer I £2,469-£4,377

Further particulars and application forms which must be returned by October 27 may be obtained by telephoning Whiteabbey 85131, 2243 or by writing to—The Establishment Officer, Ulster College, The Northern Ireland Polytechnic, Jordanstown, Newrybally BT37 0DB.

OXFORD
POLYTECHNIC

Applications are invited for the following posts:

DEPARTMENT OF CATERING MANAGEMENT

Senior Lecturer in Accommodation and Catering Studies

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of catering management.

DEPARTMENT OF MANAGEMENT & SOCIAL SCIENCES

Lecturer II or Senior Lecturer in Economics

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of economics.

Salaries: Lecturer II: £3,279 to £5,031 (efficiency bar) to £5,493. Senior Lecturer: £5,031 to £10,417.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

CENTRAL LONDON

THE POLYTECHNIC

STONE WARE SCHOOL OF CERAMICS

PRINCIPAL LECTURER

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of ceramics.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

LIVERPOOL

THE POLYTECHNIC

ASSISTANT ACADEMIC COORDINATOR

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of academic coordination.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

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MANCHESTER

THE POLYTECHNIC

DEPARTMENT OF MANAGEMENT

PRINCIPAL LECTURER IN INDUSTRIAL RELATIONS

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of industrial relations.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

MANCHESTER

THE POLYTECHNIC

DEPARTMENT OF POLYMER TECHNOLOGY

LECTURER I IN CENTRAL TECHNOLOGY

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of polymer technology.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

MANCHESTER

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PRESTON

THE POLYTECHNIC

DEPARTMENT OF MANAGEMENT

PRINCIPAL LECTURER IN INDUSTRIAL RELATIONS

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of industrial relations.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

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Northumberland
COLLEGE OF EDUCATIONAppointment of
PRINCIPAL

Applications are invited from persons with suitable qualifications and experience for the post of PRINCIPAL which will become vacant on 31st August, 1976, on the retirement of the present Principal, Miss Eileen M. Churchill, M.A.

The College will continue to be maintained by the Northumberland County Council as a major institution for the education and training of teachers. It is expected that diversified courses will also be provided from September, 1978.

The salary will be fixed at the appropriate point in Group 6 of the Pelham range of salaries for Principals. The appointment will date from 1st September, 1976.

Further particulars and application forms may be obtained from The Clerk to the Governors, Northumberland College of Education, Ponteland, Newcastle-upon-Tyne, NE20 0AB, to whom completed forms should be returned by 27th October, 1975.

TESSIDOR

THE POLYTECHNIC

DEPARTMENT OF MANAGEMENT

PRINCIPAL LECTURER IN INDUSTRIAL RELATIONS

Applicants should have a degree or equivalent qualification and should have had teaching experience at degree level and industrial or research experience in the field of industrial relations.

Further particulars and application forms may be obtained from The Deputy Director, Oxford Polytechnic, Oxford OX4 0BP.

Closing date for receipt of applications—24 October, 1975.

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